

Monitoring Our Progress
Seattle's Comprehensive Plan



City of Seattle



Department of Design, Construction and Land Use
Diane Sugimura, Director

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Comprehensive and Regional Planning Section

Tom Hauger, Manager

Diana Cornelius

Jennifer Pettyjohn

Lish Whitson

Michael Stanger

With assistance from:

Seattle Department of Transportation

David Allen

Jeff Bender

Jemae Hoffman

Ann Sutphin

Eric Tweit

Office of Sustainability and Environment

Richard Gelb

Tracy Dieckhoner

Department of Parks and Recreation

Rodney Young

Office of Housing

Janet MacKenzie

Seattle Public Utilities

Jenny Bagby

Seattle-King County Department of Health

Ann Glusker

University of Washington Service Learning Students

Michael Cooksey

Julianne Leavy

Alison Yake

Jennifer Yee

This is the third in a series of reports that monitor changes in the Seattle urban environment since the 1994 adoption of the City's Comprehensive Plan. That Plan is a collection of goals and policies describing how the City will accommodate continued population and employment growth forecast for the coming 20 years.

These monitoring reports use a set of indicators to show whether the City is accommodating growth in the way the Plan anticipated.

The results are mixed, as these examples show:

- The City has taken just about the expected number of new households, but has added more people than were expected, because the average number of people in each household is higher than assumed.
- While higher percentages of Seattle residents are taking transit to work, we are well short of the Plan's goals for transit riders and for reducing the number of people who drive alone.
- Seattle is one of only a few cities in King County that is meeting the countywide goals for affordable housing. However, the city is further behind the rest of the county in the percentage of households who own their homes.

A companion document to this monitoring report will present the findings of case studies on five urban villages – locations where the City's Plan called for most of the expected new growth to be concentrated.

These reports provide background material for a discussion the City will engage in during an update of the Plan that state law requires by the end of 2004. The reports point out successes, but also raise questions about whether the City is taking the actions necessary to achieve the goals the Plan laid out, and whether the goals in that Plan are still ones the City wants to pursue.

A handwritten signature in purple ink, reading "Diane M. Sugimura". The signature is fluid and cursive, with the first name "Diane" and last name "Sugimura" clearly legible.

Diane M. Sugimura, Director
Department of Design, Construction and Land Use

Indicator	Trend since 1994
<i>Community Indicators</i>	
Volunteering	➡
Open space	➡
Feeling safe in the neighborhoods	↗
Crime	↗
Home-ownership rate	↘
Number of households with children	↘
<i>Economic Opportunity and Security Indicators</i>	
Household income	↗
Education level of the population	↗
High school dropout rate	➡
Teen births	↗
Low-income housing units	↗
<i>Social Equity Indicators</i>	
Cost of housing	↘
Income distribution	➡
Population distribution by race	↗
Persons below poverty level	↗
Persons covered by health insurance	➡
<i>Environmental Stewardship Indicators</i>	
Water quality	➡
Air quality	➡
Tree coverage	↗
Energy consumption	➡
Water use	➡
Recycling	↘
Commuting to work	↗
Transit ridership	↗
Alternative transportation facilities	↗

↗ = Positive trend ➡ = Little or no change ↘ = Negative trend

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1. Growth indicators

Seattle's Comprehensive Plan balances two different, but related, ideas. One is that the city will continue to grow, in numbers of both residents and employees. The second is that the city should manage this growth to ensure sustainability: that resources will be used in a way that will allow future generations to continue to prosper.

The Comprehensive Plan uses its urban village strategy to address both of these ideas. The urban village strategy directs Seattle's future growth to identified urban centers and urban villages because these places already have the infrastructure, services and zoning in place to accommodate that development. These locations will also be priority areas for the City's investments in new capital facilities.

The urban village strategy seeks to achieve the following goals:

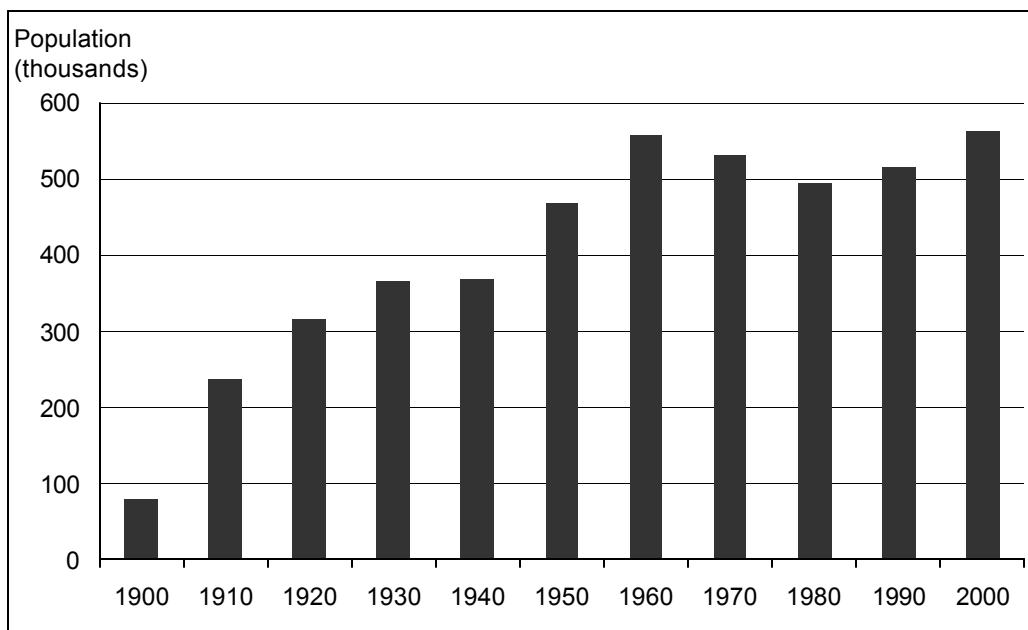
- accommodate the City's share of expected regional growth;
- revitalize existing neighborhood business districts;
- minimize impacts on most single-family neighborhoods;
- make efficient use of past and future City infrastructure investments; and
- promote higher levels of pedestrian and transit travel.

The five urban centers (Downtown, First Hill/Capitol Hill, Uptown, University Community and Northgate) together will take the lion's share of the City's expected new growth. The two dozen urban villages are smaller geographic areas than the urban centers. Concentrations of both commercial activity and multifamily housing are planned for urban villages, at lower densities than will be found in the urban centers. The two manufacturing/industrial centers provide opportunities for current and future industrial businesses to locate in Seattle, providing relatively high-wage jobs that are often accessible to workers without higher education.

This section of the report presents information about how and where growth has occurred in the city. This information can serve as a background for the other indicators presented later in the report.

Seattle's population grew 6 percent during the 1990s to exceed its previous high peak. The new residents of the City are contributing to new housing construction, most of which is being built in the City's urban centers and villages. As population grew, employment grew even faster. Between 1995 and 2000, jobs grew by 17%. In spite of the economic downturn that has occurred since 2000, jobs in Seattle remain much higher than their 1995 levels. However, regionally, jobs grew faster outside of Seattle than inside the city. This has significantly increased the number of residents of Seattle who work outside the city limits. These residents working outside the city limits are leading to changes in travel patterns, and have led to increases in the numbers of cars leaving the city every morning.

Population: Seattle's population has exceeded its previous high-point, 1960.



Source: U.S. Census Bureau

The 1994 Comprehensive Plan for Seattle provides a strategy for accepting population, households, and employment growth over a 20-year period. As the chart above shows, Seattle's population grew to a record high level in the 1990s. Tracking the changes in this data allows us to monitor the rate at which we are approaching the growth planned for in the Comprehensive Plan.

Estimated Population Growth in Seattle

	1994	2002	Net New Residents 1994-2002
Population	539,100	570,800	31,700

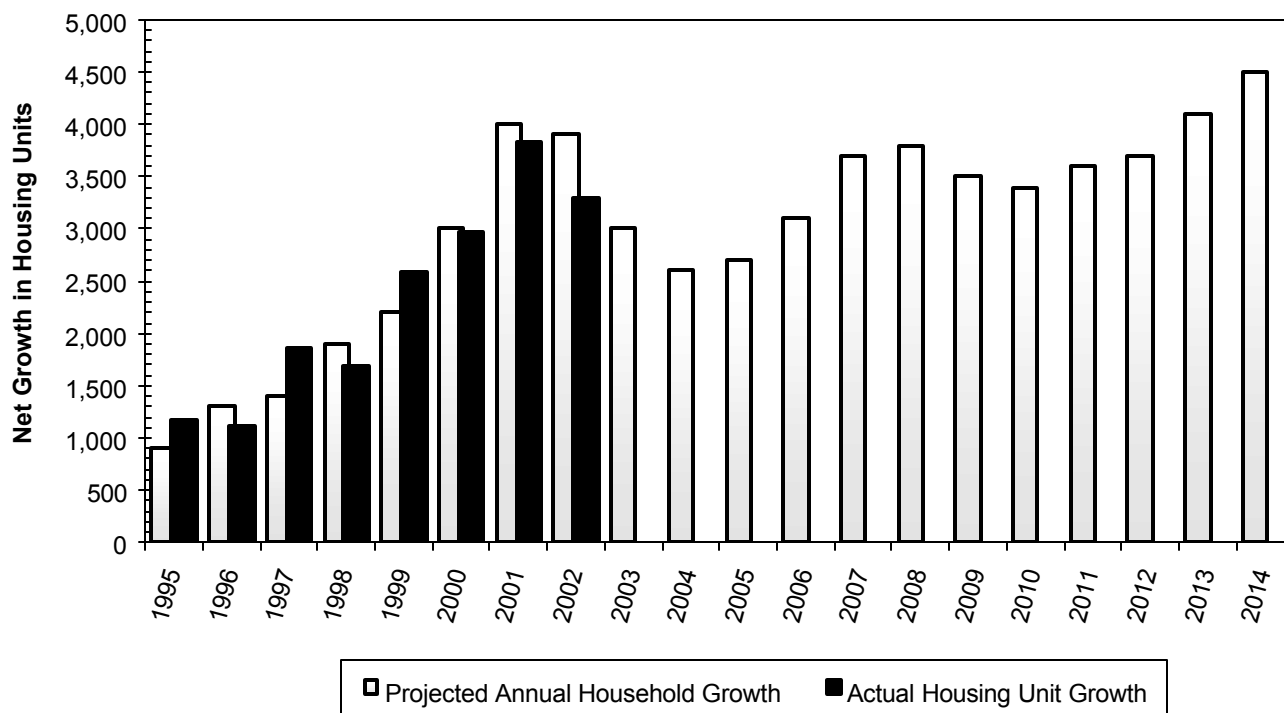
Source: Washington State Office of Financial Management, April 1 Estimates

The population figures estimate the total number of people living in Seattle. The change in population from 1994 to 2002 shows that in the first eight years after the City adopted the Comprehensive Plan, the population of Seattle grew by 6%.

The best data regarding where population growth is occurring within the City is from the United States Census. The strongest growth in population in the 1990s occurred in Downtown Seattle, with a 77% growth in residents. The Central Area, North Seattle/Lake City and the Duwamish/Beacon Hill areas all grew by more than 10% over the 1990s. The Ballard/Crown Hill area saw the least amount of population growth in the 1990s.

Housing units: Seattle's housing supply grew by approximately 18,500 units between January 1995 and December 2002.

Over eight years, thirty-one percent of the twenty-year growth targeted for Seattle has been built. Growth for this eight-year period has generally matched a year-by-year projection prepared for the city in 1993, as shown in the chart below.



Studies for the Comprehensive Plan looked at past trends and assumed that the average number of people occupying each housing unit (the household size) would shrink from 2.09 in 1990 to 2.03 in 2000. Instead, the average size of Seattle's households dropped only slightly to 2.08 in 2000. If household sizes continue to remain fairly constant, 41,000 fewer housing units would need to be built in Seattle between 1994 and 2002 to accommodate the projected population growth. In 1960, when Seattle had its previous high population number, there were 2.70 people per household in the City. This meant that only 206,000 housing units were needed to house the 1960 population, compared to the 270,000 housing units available in 2000.

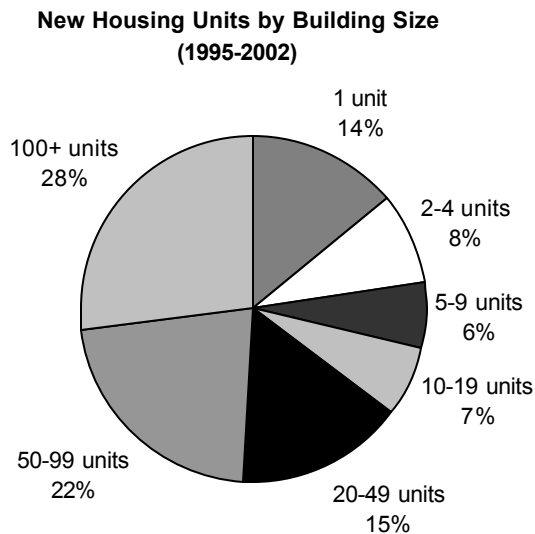
The Comprehensive Plan encourages the majority of residential growth to occur in urban centers and urban villages. The plan encourages 45% of citywide residential growth to be located in urban centers and 30% to occur in hub and residential urban villages. The remainder of housing growth is expected to occur outside of villages and centers. The Plan established housing growth targets for each urban center and urban village. The actual distribution of housing growth to urban centers and urban villages between 1995 and 2002 is similar to the goals contained in the Comprehensive Plan, with slightly more housing than planned being built in residential urban villages, and less housing than planned built in hub urban villages.

	Estimated Share of Housing Growth 1995-2002	Comprehensive Plan Share of Housing
Urban Centers	44%	45%
Hub Urban Villages	11%	15%
Residential Urban Villages	18%	15%
Outside Urban Centers and Villages	26%	25%

A larger share of growth is occurring in some residential urban villages, such as Wallingford and Eastlake than the Plan projected. A smaller share of housing growth is occurring in hub urban villages such as North Rainier and Bitter Lake Village than was projected when the Comprehensive Plan was written. However, the Plan acknowledged that some of the hub urban villages would need more time to grow than areas that already had an “urban village character.”

In addition to the 18,500 housing units built through December of 2002, the City has issued permits for 5,300 additional units which developers had not completed by January 1, 2003. Of those units, 66% will be built in urban centers and villages.

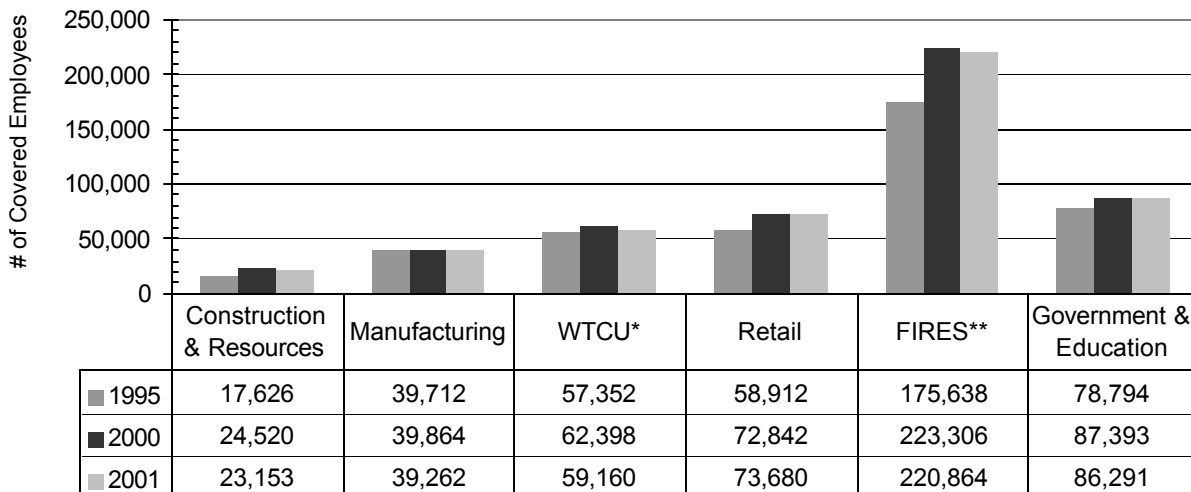
Most of Seattle's new housing units are in multifamily and/or mixed-use buildings. Buildings with more than fifty units contain fifty percent of the new units. Fourteen percent of new units are in single-family buildings. Over four hundred accessory dwelling units account for some of that growth. Smaller multifamily buildings, with less than ten units account for fifteen percent of new units.



Of the units permitted but not yet built, forty-three percent are in buildings with more than one hundred units. Except for two complexes, one at Sand Point/Magnusson Park and the other in the Pike/Pine neighborhood, all of these large multifamily buildings will contain a mix of uses. Out of the fourteen largest active multifamily projects, only two are located outside of urban villages, in South Wallingford, north of University Village and the complex at Sand Point.

Employment: Seattle's job base grew by 74,400 jobs between 1995 and 2001.

**Seattle Covered Employment by Industry
1995-2001**



*Wholesale, Transportation, Construction, and Utilities

**Finance, Insurance, Real Estate, and Services

In the six years between 1995 and 2001, the City met approximately half of its 20-year employment growth target of 146,600 new jobs. Seattle's job base grew by 17% to 502,000 employees over this period. In 2001 there were approximately 88 jobs located in Seattle for every 100 residents of Seattle.

These numbers reflect a loss of employment in the City between 2000 and 2001. In 2000, the average unemployment rate for King County was 3.2%. In 2001, unemployment had risen to 4.4%, and the county had lost 23,300 jobs. One third of those lost jobs were in Seattle. Seattle contains over half of the jobs in the county, however, so Seattle's employment losses were not as severe as those in other parts of the county.

Over 60% of Seattle's employment growth between 1995 and 2001 was in the collection of industries called the finance, insurance, real estate and services sector, especially in business services. One in five new jobs in Seattle between 1995 and 2001 was in the business services sector. Business services include many high-tech industries. Jobs in business services are concentrated in the center of the city with large increases in business services jobs in the Commercial Core, Belltown, South Lake Union and the Duwamish.

The Comprehensive Plan set a target of 146,600 new jobs as an appropriate level of employment growth for Seattle over the 20 years between 1994 and 2014. The greatest share of that growth is directed to the city's five urban centers, areas that already function as high density, concentrated employment centers with the greatest access to the regional transit network. Other areas targeted for employment growth are the two manufacturing/industrial centers (M/I Centers) and five hub urban

villages. M/I Centers are traditional industrial districts with space for these sectors to grow. Hub urban villages allow room for additional jobs with good access to residential communities.

Estimated and Targeted Shares of Citywide Job Growth

	Share of Job Growth 1995-2001	Comprehensive Plan Share of Jobs
Urban Centers	56%	65%
Downtown	38%	43%
First Hill/Capitol Hill	8%	8%
Northgate	3%	6%
University Community	8%	6%
Uptown	-1%	2%
Manufacturing/Industrial Centers	13%	10%
Hub Urban Villages	11%	15%
Residential Urban Villages	7%	No Target
Outside Centers and Hub Villages	13%	No Target

Over half of the city's new jobs between 1995 and 2001 were located in urban centers, primarily in the Downtown Urban Center. All of the urban centers, except Uptown (Lower Queen Anne) saw employment growth rates that were higher than the citywide employment growth rate. The city's manufacturing/industrial centers accounted for 13% of new jobs in Seattle, with most of those new jobs locating in the Duwamish Manufacturing/Industrial Center. Over 20% of the jobs added between 1995 and 2001 were in residential urban villages and other areas outside of the city's targeted employment areas.

Among urban villages, employment growth was greatest in the Downtown Commercial Core. That village accommodated 24% of all new jobs in the city. This increase was equal to a 20% increase in the total number of jobs located in the Downtown Core. The fastest growing urban villages include Ravenna, with a 58% growth in employment over six years; Pike/Pine which saw a 42% increase in employment; and South Lake Union with a 40% increase in employment over five years. The change in employment in the Ravenna urban center village results from increased retail jobs, primarily at University Village. The increased growth in the Pike/Pine urban center village is in both retail employment and in service employment. South Lake Union's growth is driven by the finance, insurance, real estate and services sector with the greatest growth in engineering, accounting, research and management (which includes both for-profit and not-for-profit biological research) and business services.

Employment in Seattle grew slightly slower than employment in King, Kitsap, Pierce and Snohomish counties combined. Most of that regional growth was in areas outside of Seattle in King County. King County outside of Seattle saw a 27% growth in jobs between 1995 and 2001, compared to Seattle's 17% growth. The number of Seattle residents who worked in areas outside Seattle grew 40% between 1990 and 2000. In 2000, almost 1 in 4 employed residents of Seattle worked outside the city, most of who worked in suburban King County.

Transportation Mobility: Traffic volumes increased and travel patterns changed between 1994 and 2001.

As population and employment have grown, traffic volumes have increased, and travel patterns have changed. The number of cars entering and leaving Seattle every day increased by approximately 9% between 1994 and 2002 – a slightly lower rate than the changes in population and employment. Traffic volumes have actually decreased between 2000 and 2002, likely reflecting the slow-down in the economy.

The number of Seattle residents who worked outside Seattle grew 40% between 1990 and 2000. This sharp increase is evident in the pattern of traffic volumes during peak travel periods. Traffic volumes in the traditional peak directions (entering the city in the morning and leaving the city in the evening) have not increased significantly since 1994, while traffic in the non-peak directions has increased by 11 to 13%. Given the higher congestion levels for commute trips into the city and better transit service to downtown, the growth in work trips to Seattle is more likely to be accommodated by transit.

Traffic volumes entering and leaving the downtown area (bounded by Lenora Street, Boren Avenue and Interstate 5, South Jackson Street, and Elliott Bay) have changed little since 1994. Approximately 222,000 vehicles enter and exit the downtown area each day. The most substantial changes since 1994 were a six percent increase in outbound trips during the morning peak hour and a six percent decrease in outbound trips during the evening peak hour. The number of vehicles leaving the downtown area during the evening peak hour is approximately 21,000, while approximately 12,000 vehicles leave the downtown area during the morning peak hour.

The City's primary measure of transportation congestion is called the "volume-to-capacity ratio." This ratio compares the number of motor vehicles actually using a collection of parallel roads where those roads cross an imaginary line – called a screenline – to the amount of vehicles those roads can carry at a reasonable comfort level. If the volume-to-capacity ratio gets close to or greater than 1.0 (the point at which traffic volume equals the theoretical roadway capacity), cars will begin to experience significant delays and backups will occur. The city uses screenlines to measure traffic because this method recognizes that some drivers have the option of choosing among different parallel roads when they are looking for the least congested path to their destination. Generally, congestion is increasing as traffic volumes increase across the city. While the afternoon peak commute hour continues to experience more congestion, the morning commute period has shown higher percentage increases in congestion.

The most congested areas in Seattle are across the Ship Canal, east-west through South Lake Union, the North City Limit, and across the West Seattle Bridge. Travel into downtown from I-5 in the morning is also fairly congested, although it is not as congested in the afternoon. The biggest increases in congestion between 1994 and 2001 have occurred across the Ballard Bridge and in South Lake Union. None of the screenlines has exceeded the volume-to-capacity ratio established as its level of service standard in the Comprehensive Plan.

As traffic congestion has increased in Seattle, some residents are finding other means of getting around. The number and percent of Seattle commuters using transit, walking, or riding a bike to work increased between 1990 and 2000. Between 1994 and 2001, the number of trips taken on Metro Transit in Seattle increased from fewer than 53 million to over 60 million trips annually. With a new light rail line

and new monorail now planned for Seattle, the number of transit trips within Seattle is expected to increase even higher over the next ten years.

The remaining indicators are organized according to the Comprehensive Plan's four core values:

- Community
- Economic Opportunity and Security
- Social Equity, and
- Environmental Stewardship.

These indicators are intended to track how well those four values are being achieved under the Comprehensive Plan. They are not necessarily tied to specific goals in the Comprehensive Plan but are intended to be broad indicators of how well the city is meeting its goals under the Comprehensive Plan.

2. Community indicators

Community, as discussed in the Comprehensive Plan, means the connections among people within the city and within the region. Neighborhoods share one type of community. The city as a whole has another sense of community, and the neighborhoods and the city participate in a regional community.

As a community, we have a responsibility to ourselves, to our children, and to our neighbors in the regions outside Seattle. "Community" means our sense of that shared responsibility. The indicators in this section help measure how we are living up to our responsibilities.

The indicators that measure community are:

- People who volunteer in community activities
- Open space
- Crime
- Feeling safe in the neighborhoods
- Home ownership rate
- Number of households with children

Indicators of community are showing mixed results in meeting the city's goals. While crime is down in Seattle and residents are feeling safer, fewer households own their own home, and the number of households with children has fallen. The city has been able to match population and housing growth with increases in parks and open space, and there appears to be little change in the rates at which residents are volunteering.

Volunteering: 43% of Seattle adults regularly volunteer their time. Almost 30% of these citizens volunteered more than 10 hours a week.

This information comes from a citywide residential survey in 2001. A similar survey in 1996 indicated that approximately 42% of Seattle residents regularly volunteered for community-benefiting activities. Of those who volunteered, nearly half volunteered more than 10 hours a week. While the portion of city residents volunteering has stayed approximately the same, residents are volunteering fewer hours.

Small businesses have an even higher rate of participation. Three out of four small businesses responding to a 2002 citywide business survey reported that they participate in community service activities.

This indicator measures one way that Seattle residents express their commitment to the community. Volunteering can take many forms: coaching children's sports teams, driving elderly people to medical appointments, serving on the board of a non-profit organization, planting street trees, being a block watch captain, collecting door-to-door for charitable campaigns, or working on the implementation of a neighborhood plan.

Goal HDG1 of the Comprehensive Plan's Human Development element calls for "Mak[ing] Seattle a place where people are involved in community and neighborhood life; where they help each other and contribute to the vitality of the city." Policy HD2 calls for promoting volunteerism and community service.

By participating in civic and community processes, including neighborhood plan implementation, Seattle citizens understand that they can make a difference. Participating in community development is a way of taking responsibility for the larger community and understanding that individuals have the power to change the community for the better.

Seattle provides a number of different programs and opportunities for residents to get involved and participate in City government and neighborhood facilities. Many City departments, including the Parks Department and Seattle Public Library have volunteer programs that citizens can access by contacting those departments. In addition, a number of non-profit organizations can connect volunteers to programs needing their assistance.

Open space: 461 acres of new open space since 1994

Since September 1994, the City has acquired 461 acres of open space for parks, community gardens and green spaces. In addition, the city currently has 12 acres of community gardens or P-patches, including 10 gardens that have opened since 1994.

The Comprehensive Plan Land Use and Capital Facilities elements provide goals for open space in Seattle. The citywide goal is 1 acre of “breathing room” open space for every 100 citizens. Breathing-room open space includes open spaces that are permanently set aside as open whether or not they are accessible for public use. For example, breathing room would include a steep wooded hillside protected for natural habitat, even if it were not accessible for recreation. Some open spaces owned by other public agencies, such as the Port of Seattle were also counted toward this goal. Since 1994, the amount of “breathing room” space per resident has increased in Seattle. This inventory does not include schoolyards or university campuses, which may also provide important community open spaces.

In addition to the goals for breathing room open space, the Comprehensive Plan has goals to provide: 1) at least one acre of usable open space for every 1,000 households within urban villages and 2) open space within an eighth to a quarter of a mile of residents in urban villages.

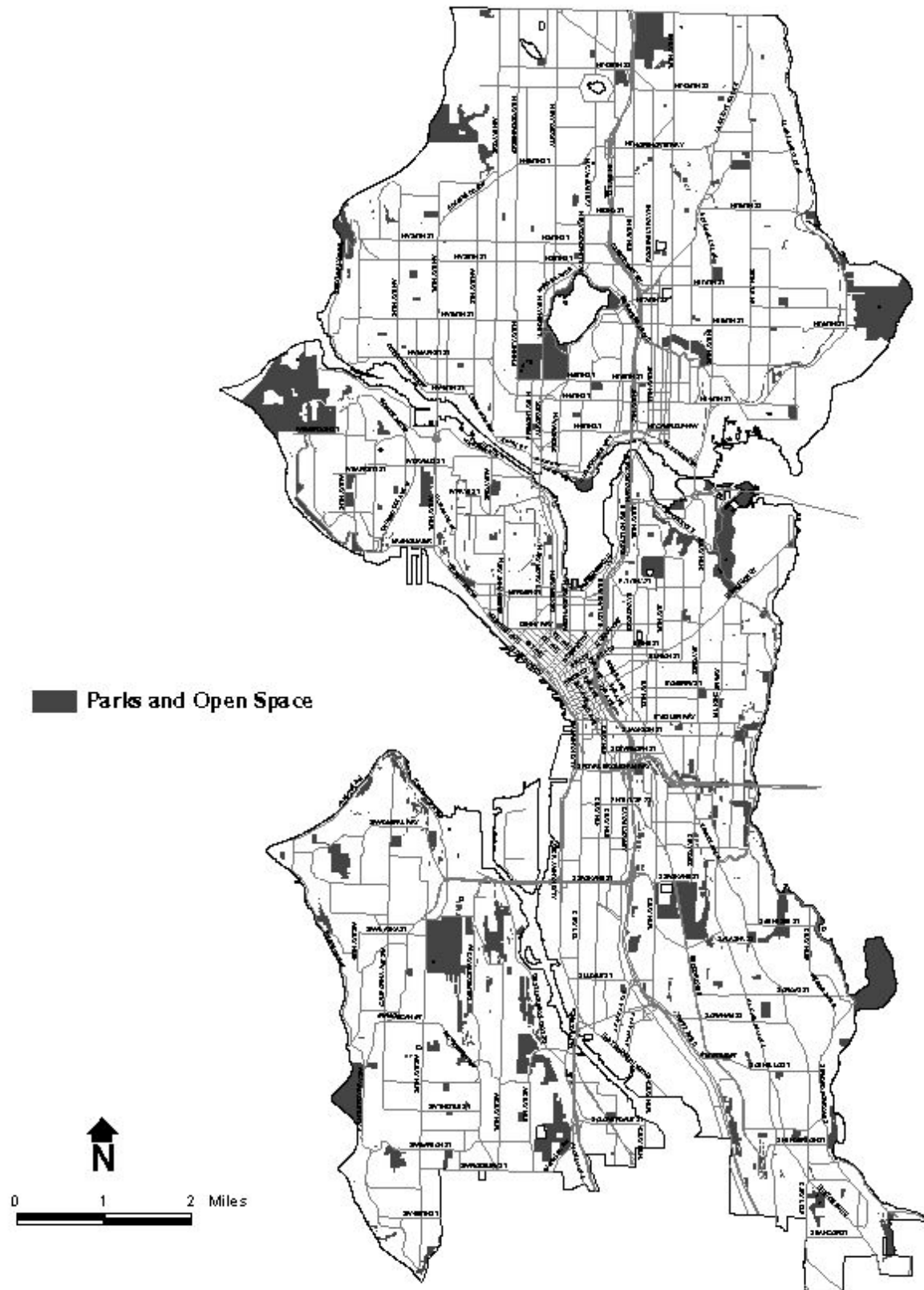
Most of the thirty-eight urban villages contain gaps in terms of residents' proximity to usable open space. The severity of gaps in urban village usable open space varies. Usable open space is available in most of the Crown Hill, Green Lake and Upper Queen Anne villages. On the other hand, almost all of the Northgate, University, Ballard, Denny Triangle, 12th Avenue, and West Seattle Junction villages have significant deficiencies in residents' access to usable open space.

Open space may be used for recreation, wildlife habitat, growing food, or simply as a place for quiet contemplation. Many citizens also consider open space a cultural resource. The Cultural Resource Element to the Comprehensive Plan includes Policy CR4:

“Continue Seattle’s long tradition of providing a rich variety of public open spaces, community gardens, and public facilities; to provide residents with recreational and cultural opportunities, promote environmental stewardship and attract desirable economic development.”

In November 2000, Seattle residents voted to create new parks and open spaces through the Pro-Parks levy. The levy is funding the acquisition, development, stewardship, maintenance and programming of new and existing parks. Pro-parks included \$26 million for park acquisition and over \$100 million for the development of parks and open space, including turning some underutilized City-owned properties into park space.

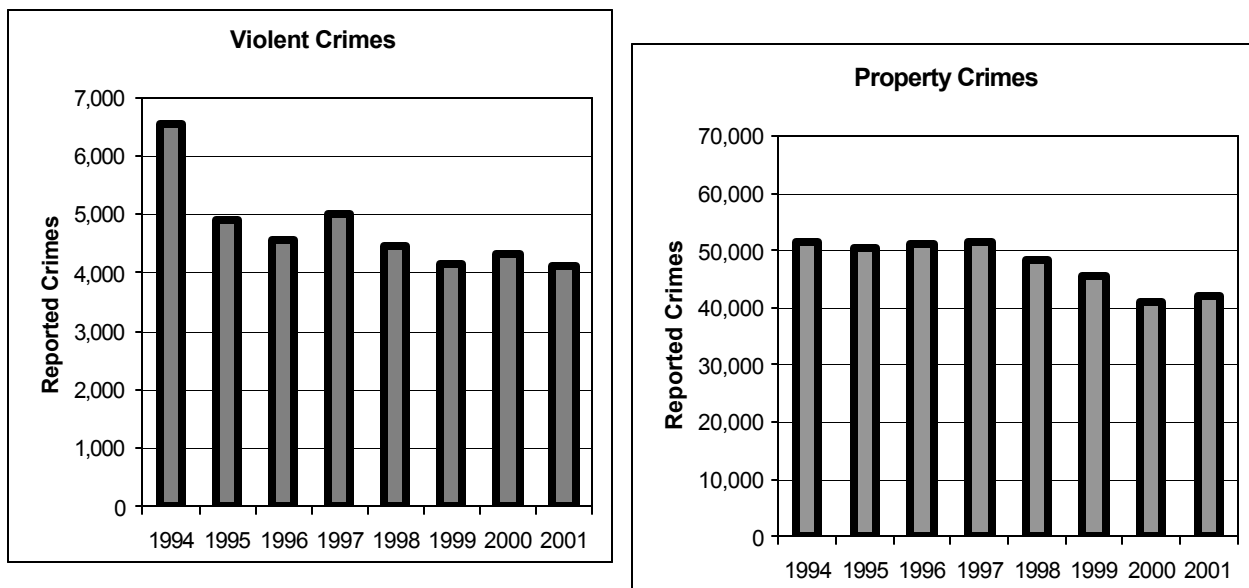
City of Seattle Parks and Open Space



Crime: Both property and personal crime have decreased.

The number of violent crimes in Seattle has fallen by 37% since 1994 from 6,500 assaults, robberies, rapes and murders that year to 4,100 in 2001. The number of property crimes has fallen from 51,000 thefts, burglaries and auto thefts in 1994 to 42,000 in 2001. This was an 18% drop in the annual number of property crimes.

Only one category of crime has increased since 1994. Auto theft has increased in Seattle from 6,400 thefts a year to 8,755 in 2001. The number of murders in Seattle fell by 64% between 1994 and 2001.



The decrease in the crime rate suggests that the quality of public safety is improving in Seattle, even as the city's population continues to increase.

Goal HDG7 of the Comprehensive Plan's Human Development Element is to "Strive to reduce violence and fear of crime."

In addition to the important work that police officers do, other City programs focus on reducing the number of crimes in Seattle. Among those programs are Neighborhood Action Team Seattle (NATS), an inter-departmental/interagency team whose purpose is to work with neighborhoods to address persistent problems affecting public safety and livability.

Feeling Safe in the Neighborhoods: Residents are feeling safer in Seattle.

Percentage of respondents feeling very safe or somewhat safe in Seattle

Year	Outside Downtown		Downtown	
	During the Day	After Dark	During the Day	After Dark
1996	not asked	74%	90%	41%
1997	97%	75%	92%	47%
1999	97%	74%	94%	54%
2001	97%	75%	96%	58%

Percentage of respondents who feel that crime is not a major problem in Seattle

Year	Violent Crime not a major problem	Property Crime not a major problem
1996	89%	85%
1997	93%	89%
1999	92%	86%
2001	92%	87%

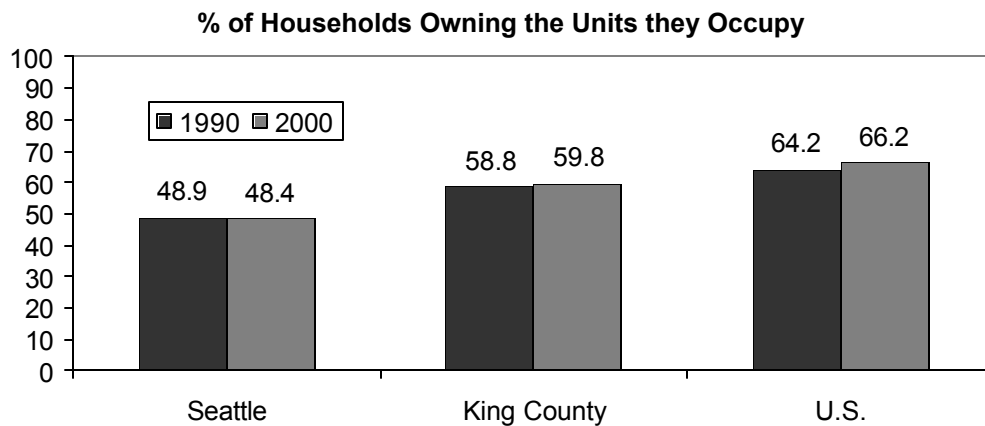
In a separate survey, fifteen percent of Seattle's small businesses in 2002 said that crime is a major problem in Seattle. Nineteen percent of small businesses felt that public safety after dark was a major problem. Only four percent of small businesses felt that public safety was a major problem during daylight hours.

This indicator measures how safe people feel in their neighborhoods and downtown, during the daytime and after dark. It also reports whether people feel that violent and property crimes are major problems for them.

The Comprehensive Plan's Human Development Element, Goal G9, is to "Strive to reduce violence and fear of crime." The fear of a crime is sometimes different from the actual amount and type of crime occurring. The perception can be very powerful, however, and people will act on their perceptions possibly avoiding a neighborhood by not shopping, living, or doing business there.

Opportunities to meet neighbors and community members can help people feel more comfortable and less afraid in their community. The City helps to support a number of different forums for people to meet their neighbors, from Block Watch programs to community clean-up activities to neighborhood street tree planting programs. The Comprehensive Plan's urban village strategy that encourages the development of mixed-use neighborhoods has the effect of putting more pedestrians and more "eyes" on the street and increasing the feeling of safety.

Home ownership rate: Home ownership in Seattle declined slightly



in the 1990s.

Source: U.S. Census

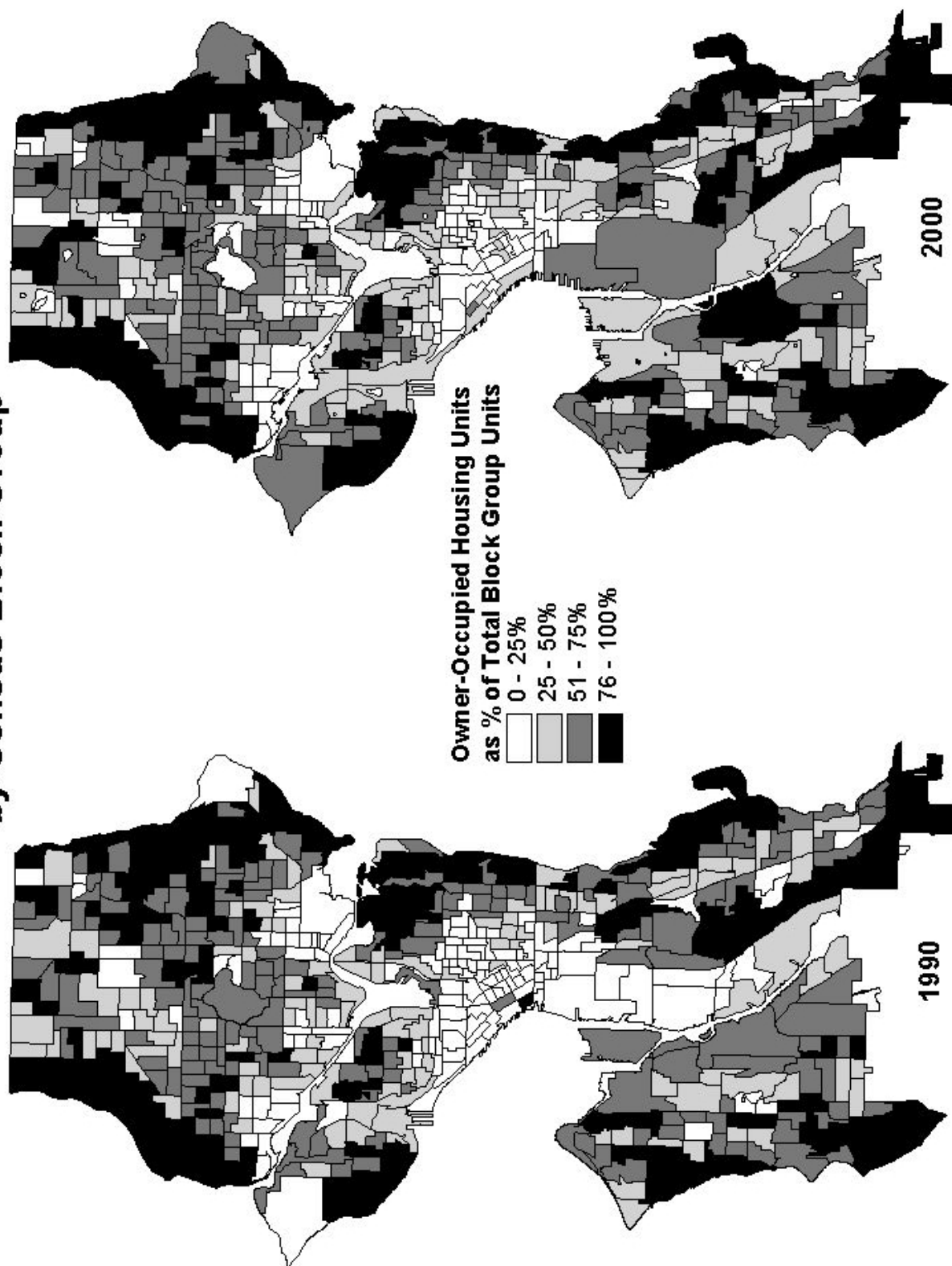
The 2000 census reported that 48.4% of Seattle households own their own home (single-family homes, townhouses and condominiums). This is significantly lower than the King County or United States rate of home ownership. One reason for a lower home ownership rate in Seattle may be the significantly higher portion of Seattle's housing stock that is in multifamily buildings, as opposed to single-family structures. Multifamily buildings are more likely to be available for rent than are single-family houses.

For this reason, the home ownership rate in urban villages is lower than the home ownership rate in some single-family areas outside of the urban village boundaries. Urban villages were generally designated in the commercial and multifamily hearts of neighborhoods.

The Comprehensive Plan's Housing Element Goal G8 is to "Achieve a rate of owner-occupancy of housing no less than the county average owner-occupancy rate." The Plan promotes home ownership in order to foster a sense of community, encourage investment in housing, and minimize displacement of low-income residents due to gentrification of neighborhoods. The City also has an interest in safeguarding the condition and quality of the housing stock and in maintaining attractive and livable neighborhoods.

The City has limited powers to affect the owner occupancy rate. The choice to buy a home in Seattle is based on many factors including price, income and savings. Where individuals choose to live is also dependent on more subjective "quality of life" decisions, such as perceived quality of schools, the perception of safety, lot size, and the amount of nearby open space. Some of these factors are monitored elsewhere in this report.

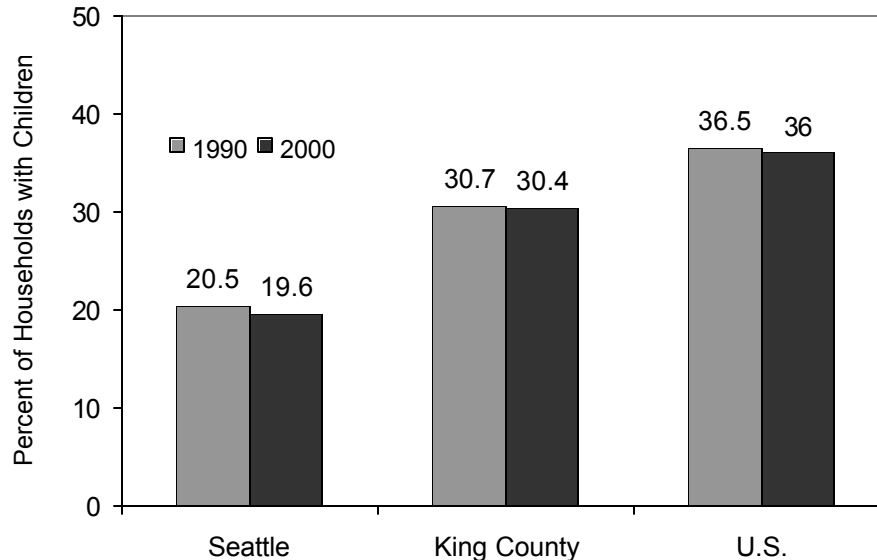
Home Ownership by Census Block Group



However, the City can affect somewhat the owner occupancy rate through land use policies and funding programs. About two-thirds of the total land area within the city limits is zoned for single-family homes. Because single-family homes are more likely to be owner-occupied, continuing these land use policies can help keep the number of owner-occupied homes relatively stable. In addition, the City has provided funds, and in the current housing levy will continue to provide funds to non-profit organizations for developing affordable housing specifically for owner-occupants.

The Housing Affordability indicator has obvious relevance to the home ownership rate in Seattle. By describing the ratio of the median sales price of a Seattle home to the median income, it suggests whether the average household can afford to own a home.

Number of households with children: since 1990, the share of households in Seattle with children has declined.



Sources: U.S. Census Bureau, 1990 Census and Census

The U.S. Census Bureau data measures how many households in Seattle include persons less than 18 years of age. Seattle has had a comparatively low number of households with children for many years. In Snohomish and Pierce counties, the number of households with children is higher than the national average. This may mean that some households with children choose those areas over Seattle because of their comparatively low housing costs.

On the other hand, 40% of all Seattle households contain only one person. This is the fifth highest ratio of one-person households among places in the nation with 100,000 or more residents. It could be that people living alone are more able to afford housing in the city because it is easier for them to pay a larger share of their income for housing in Seattle than families with children. The number of households in Seattle with only one person is double the number of families with children.

We measure the number of households in Seattle with children because children are a vital, and often vulnerable, part of our community. Many elements of the Comprehensive Plan address the importance of children and of planning for their future. The Human Development Element states, “Our children and youth are the most important resources in Seattle’s sustainability. The entire community should share in supporting their growth and development.”

Other Comprehensive Plan policies relevant to making Seattle a community that is friendly to families with children seek to:

- ensure that children can walk or bike to a variety of services in their neighborhood,
- provide different housing types with suitable play areas nearby, and
- ensure that children can have a quality education in Seattle through partnerships with education institutions.

3. *Economic opportunity and security indicators*

The framework value of Economic Opportunity and Security is defined in the Comprehensive Plan to include:

- equal opportunity for all Seattle citizens;
- maintaining a high quality of life, as measured by health care, food and shelter, education, and increased revenues to support needed public investment;
- a strong position in the global economy; and
- a learning environment that continually builds and enhances productive skills.

In the citywide residential surveys, citizens were asked to rate how jobs and economic opportunities have changed in Seattle. In 1996, 38% of respondents said that opportunities had improved. By 2001, only 36% of respondents believed that opportunities had improved, after increasing to 56% of residents seeing improvements in 1997 and 54% in 1999.

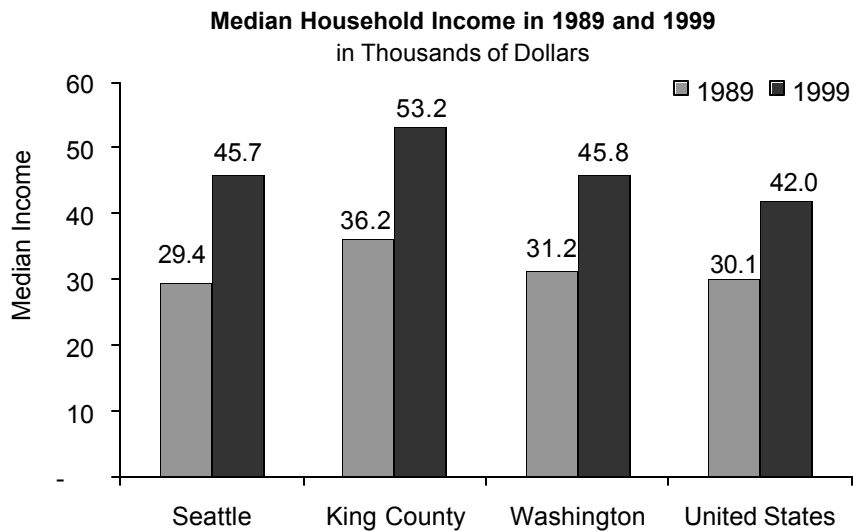
The indicators chosen to measure economic opportunity and security are:

- Household income
- Education level of the population
- High school dropout rate
- Teen birth rate
- Number of low-income housing units

Each of these indicators shows a different snapshot of the overall goals of economic opportunity and security. Taken together, they provide a sense of the city's progress toward a social equity and a productive and competitive economy.

Most of these indicators are showing positive trends. Household income is up in Seattle and increased quickly between 1989 and 1999. Seattle's population is one of the best educated in the country, while the high school drop-out rate has remained fluctuated between 1994 and 2002, but remains fairly constant. The teen birth rate has dropped sharply between 1994 and 2000. Finally, in spite of drops in federal funding for subsidized housing units, the City and State have increased funding for subsidized units and the number of subsidized units has increased between 1994 and 2002.

Household income: Seattle's Median Household Income increased more than King County, Washington State, or the nation.



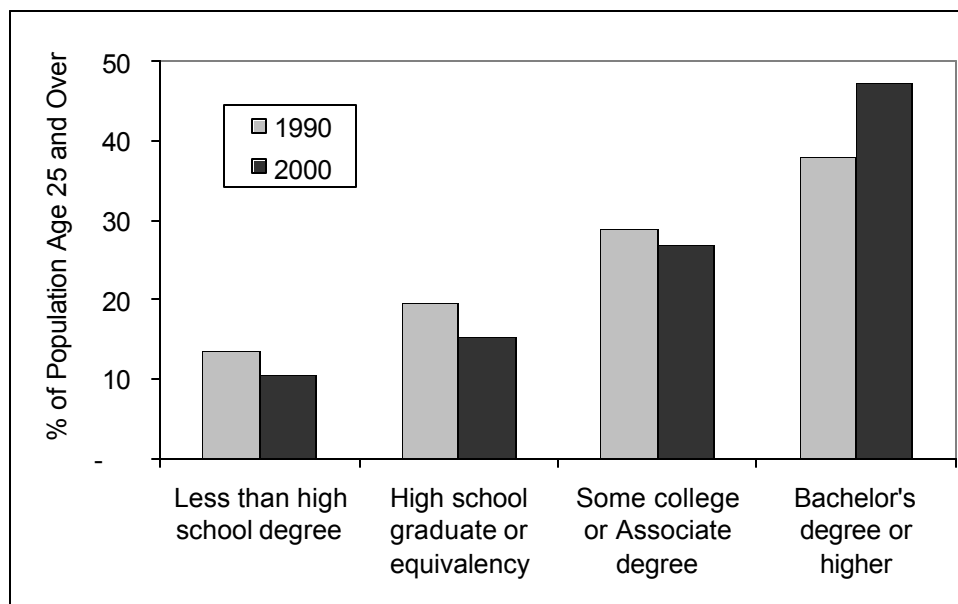
Sources: U.S. Census Bureau, 1990 and 2000 censuses.

This indicator measures the change in income for households in Seattle between 1990 and 2000. Each figure shows a trend toward increased income.

An increase in household income means an increase in real purchasing power, when wages increase above the level of inflation. An increase in real purchasing power relates to several goals in the Comprehensive Plan's Economic Development Element. Goal EDG4 calls for the city to develop a highly trained work force that can earn a living wage.

Higher household income also relates to the affordability of housing in Seattle. As wages increase, fewer households may need assistance with housing costs. (Housing Element Goals HG12 to HG17). On the other hand, increased housing costs may lead to an increase in the median income of home owners and renters, as lower-income households become unable to afford housing in Seattle.

Education level of the population: Seattle has a higher share of



adults with a college degree in 2000 than in 1990

The number of Seattle residents with Bachelors degrees increased by more than 30,000 between 1990 and 2000. More than 20,000 additional residents have graduate or professional degrees in 2000 than a decade earlier. There were 17,000 fewer residents who had attained a high school diploma or less. Surprisingly, Seattle has a higher share of residents with less than a high school diploma than the rest of King County, even though it also has a higher share of residents with Bachelor's, graduate and professional degrees than the rest of the County.

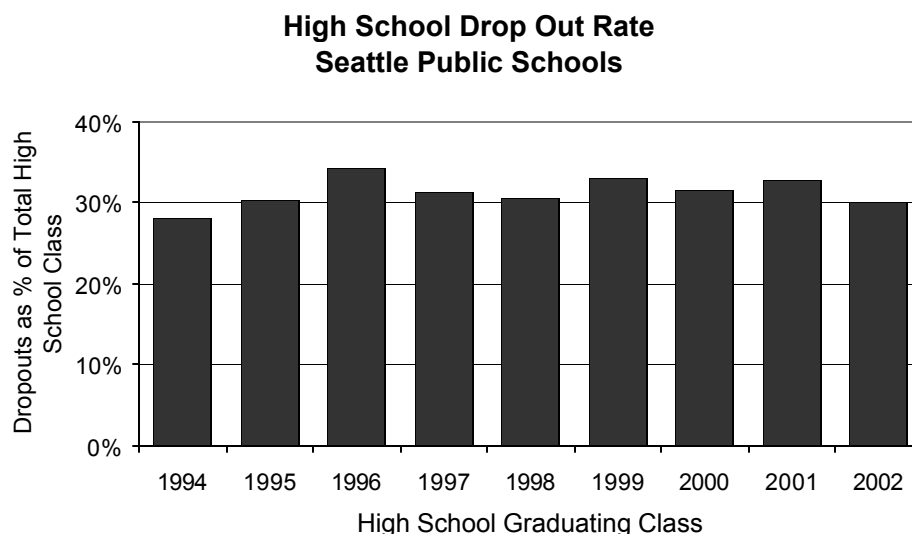
The City's Colleges and Universities have helped to create such a high level of education in Seattle's population. In 2000, over 11 percent of residents of Seattle were enrolled in college or graduate school.

The Human Development Element describes this aspect of the Comprehensive Plan vision in HDG4: "Promote an excellent educational system and opportunities for life-long learning for all Seattle residents" and in HDG5: "Promote development of literacy and employability among Seattle residents."

Higher levels of education may provide a higher quality of life, and higher education can mean more marketable skills--and higher wages--in an increasingly competitive and technologically oriented economy. Higher education pays off for the community too. If Seattle workers meet employers' increasingly sophisticated needs, they can contribute to the economic growth of the city and the region. The Comprehensive Plan's Economic Development element recognizes that a strong economy demands a strong educational infrastructure. Goal G4 in that Element states that a city goal is to "Develop a highly trained local work force that can better compete for meaningful and productive employment, earn a living wage and meet the needs of business."

Although the City is not an education provider, City programs help support the Seattle school district to provide an environment in which children thrive and are motivated to stay in school. The Families and Education levy funds a network of multi-cultural, community-based programs for teens to encourage success in school and to prevent involvement in gangs, drugs, and crime. In 1998, the City started Project Lift-Off, to build a network of affordable early learning and youth engagement programs to improve the way our community prepares children for the future. For example, as part of Project Lift-Off the City helps to support community education centers, which have led to better school attendance, higher homework completion rates, and a more positive approach to school, among participants.

High school dropout rate: the high school drop out rate for students in the Class of 2002 was higher than the 1994 rate.



The dropout rate tracks students entering high school and determines how many of those students complete high school within two years of their expected graduation date. In 1994, 28.1% of students dropped out of high school before graduating. In 2002, 30.1% of students had dropped out. Between 1994 and 2002, the dropout rate has fluctuated at or above 30%, with a high of 34.3% in 1996.

Dropout rates have differed widely by racial/ethnic group. In 2002, African American students were more likely to graduate than they were in 1994. However, American Indian, Latino and White students were less likely to complete high school in 2001 than they were in 1994. The dropout rate for Asian students has stayed the same.

% of Students Completing (or still in) High School by Race/Ethnicity

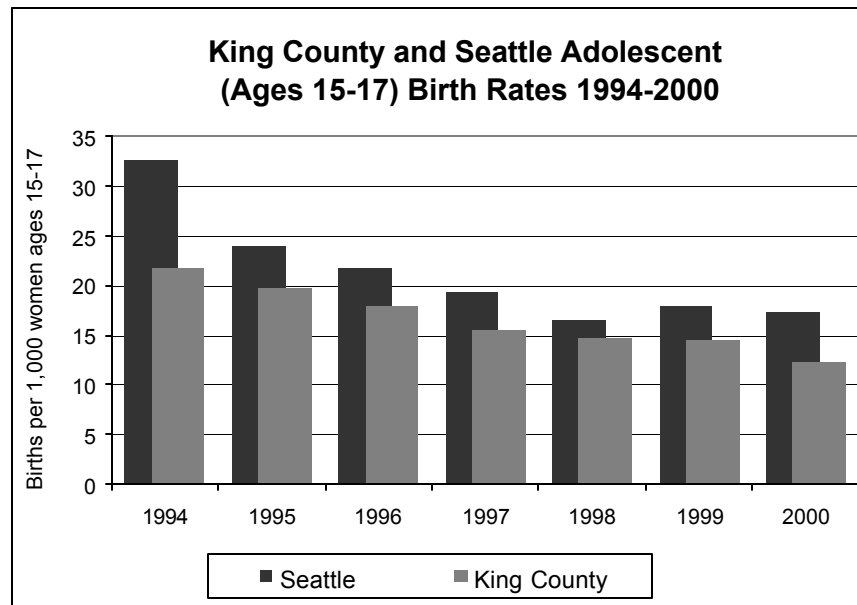
	Class of 1994	Class of 2002	Change 1994-2001
African American	59%	61%	+2%
American Indian	58%	52%	-6%
Asian	80%	80%	0%
Latino	64%	59%	-5%
White (non-Latino)	76%	73%	-3%
Total	72%	70%	-2%

Dropping out of high school can impair a person's ability to earn a living wage in an increasingly competitive economy. High school can provide basic skills on which students can build further career and vocational skills. Not having a high school diploma can be a barrier to getting many jobs. According to the 2000 Census, Seattle residents without high school diplomas are 2.5 times more likely to be in poverty than are residents with diplomas.

The Comprehensive Plan's Economic Development Element, Policy ED1, commits the City to:

“...work with the Seattle Public Schools to improve the quality of public education and increase the likelihood that all young people will complete high school having achieved the basic competency needed to continue their education and/or enter the work force.”

Teen births: The rate of births to teenage mothers in Seattle has dropped 45% since 1994.



Seattle's teen birth rate has decreased since 1994, although there has been a slight increase since 1998. Seattle's teen birth rate is slightly higher than the rate in other parts of King County. In 2000, the Seattle/King County Health Department measured teen births in Seattle at about 17 births per 1,000 teenage women in Seattle. The rate for King County outside of Seattle was 11 births per 1000 teenage women. However, the differences between Seattle and the rest of the County are closing. Between 1995 and 1999, the differences between the city and the King County birth rates were statistically insignificant given the size of the populations measured.

Through the Comprehensive Plan Human Development goals, the City has committed to:

- promoting healthier lifestyles,
- reducing health risks such as those associated with teen pregnancy, and
- providing children and youth with the opportunity to develop their personal and career opportunities fully.

Teen pregnancy can have negative effects on the future of both the mother and her child. For the child, teen pregnancy tends to be associated with poorer pre-natal care, lower birth weights, and more physical and psychological development problems. For the mother, pregnancy can interrupt education and the development of career skills. Consequently, teen pregnancy is often associated with unemployment, lack of education, and poverty.

Human Services Element goal HDG8.5 seeks "the health and well-being of all women, children and families in Seattle by moving toward the elimination of unintended pregnancy."

The City of Seattle's Families and Education Levy provides funds for teen health clinics in High Schools, which can provide reproductive health services to Seattle's teens.

Low-income housing units: in 2002, 28,142 units of subsidized rental housing were available to low-income households in Seattle.

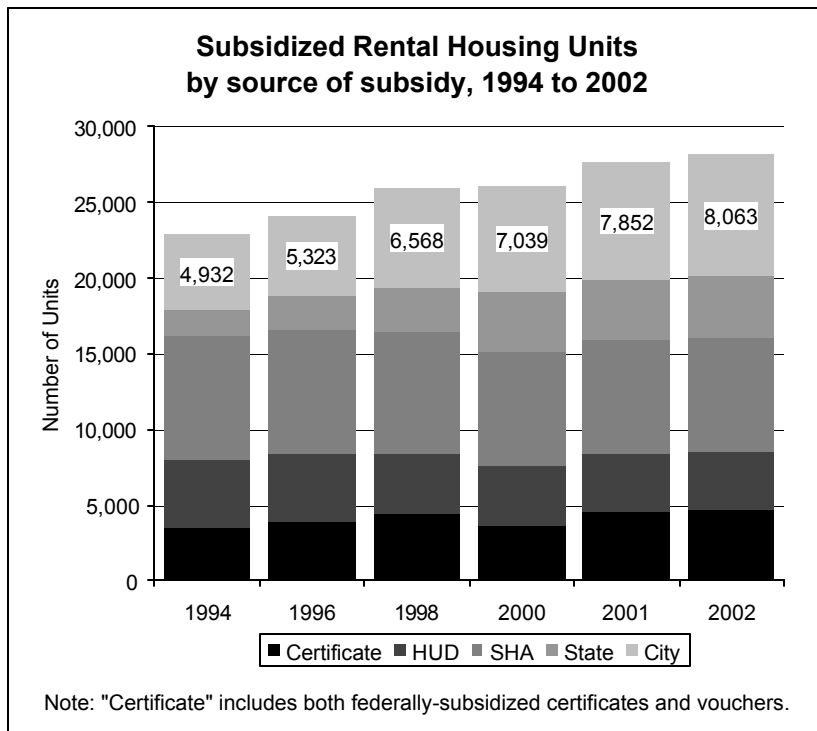
Approximately 30% (8,063) of these units received assistance from the City of Seattle. The City helped to produce 813 new housing units for low-income households in 2001.

Between 1978 and 2002, the total number of assisted rental housing units in Seattle has more than doubled, from approximately 12,000 to over 28,000. The biggest gains in units affordable to low-income households in the last eight years have resulted from City and State actions. The City has been increasingly active in housing assistance. From 1994 to 2002, over 3,000 units have received City subsidies. Seattle voters have passed four levy measures since 1981 to help provide low-income housing.

The number of low-income units receiving subsidies from the federal government (Department of Housing and Urban Development and the Seattle Housing Authority) has been falling for many years. Part of this decrease is a result of HUD's shift away from subsidizing specific units towards granting vouchers which can be used by households to subsidize housing that they choose. The use of certificates and vouchers by households to subsidize units in Seattle has grown from 3,525 certificates in 1994 to 4,675 certificates in 2002.

Although the production of low-income housing assistance has expanded, the number of household units needing assistance has also grown. Between 1990 and 2000 over 6,500 additional low-income units became available in Seattle. However, in 2000, over 26,000 of Seattle's households were earning less than 50% of the city's median income and paying more than 35% of their income for housing costs. In addition, the Seattle/King County coalition for the homeless counted almost 1,500 homeless people on Seattle's streets in 2001. Over 3,000 households used Seattle's services for the homeless in 2001.

The Comprehensive Plan's Housing Element sets out the city's policies to provide housing that is affordable. Section C of the Housing Element articulates the city's Goals and Policies specifically relating to housing affordable to low-income, moderate-income and publicly subsidized low-income households.



The Comprehensive Plan is required to be consistent with the Countywide Planning Policies. Countywide Planning Policy AH-6 requires the Growth Management Planning Council (GMPC) to review the performance of cities within the county, including Seattle, with respect to meeting low- and moderate-income housing needs. The County has determined that, in order to meet demand for low-income housing, at least 21% of the housing stock should be affordable to those earning under 50% of median income, and 17% should be affordable to those earning 50% to 80% of median income. Taken together, 38% of the housing stock should be affordable to these low income groups. Seattle is one of only nine cities in King County providing sufficient housing for both income groups, and one of two cities outside of South King County to provide housing affordable to those groups.

The City has numerous programs that assist low-income renters and home owners, including:

- loaning money to non-profit organizations to develop housing,
- rental subsidies to households,
- support for low-income households that are forced to move out of their apartment,
- weatherization programs and other energy-saving measures that lower housing costs for low-income homes,
- housing rehabilitation loans to home owners,
- minor home repair assistance, and
- first-time down-payment assistance.

4. Social equity indicators

Part of our responsibility as a community is to ensure the equitable sharing of resources to all. Sharing resources means that everyone can contribute to and benefit from the community's growth. By promoting and measuring Social Equity, a Comprehensive Plan core value, the city strives to ensure sharing of resources.

The City can have an effect on social equity through several strategies. These include the City's refusal to tolerate discrimination in employment or housing and its commitment to provide equal opportunities in education and employment. In the Comprehensive Plan, the City also committed to paying special attention to providing equal opportunities for residents living in communities with high poverty rates.

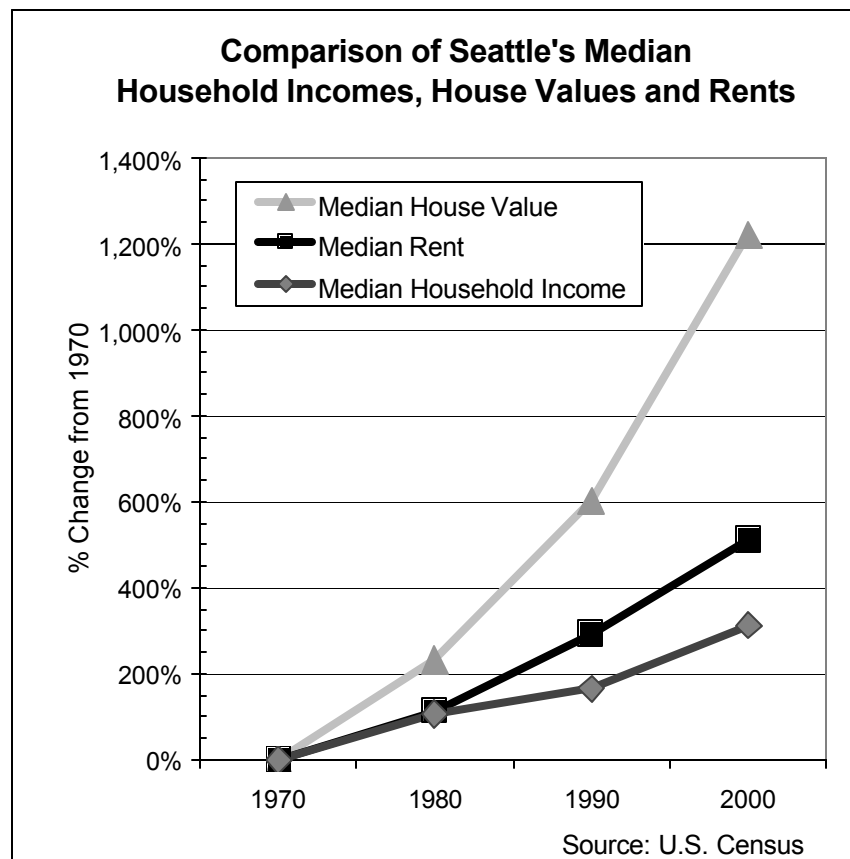
The indicators chosen to measure social equity are:

- Housing affordability and cost of housing
- Income distribution
- Population distribution by race
- Persons below poverty level
- Persons covered by health care insurance

As with community indicators, social equity indicators are showing mixed results. Housing in Seattle continues to become less affordable to Seattle's households. Potentially related, the number of Seattle residents in poverty has fallen between 1990 and 2000. While large portions of the city continue to have very high percentages of residents who are White, Seattle is becoming more racially diverse, and people of color are becoming a stronger presence in larger portions of the city. With limited exceptions, the distribution of Seattle's wealthier and poorer households has remained the same between 1989 and 1999. The percent of residents with health insurance grew between 1994 and 2000.

Housing affordability and the cost of housing: median home values and rents have continued to increase faster than household income since 1994.

The figures in the chart reflect changes in median income, rent and house value as reported to the U.S. Census Bureau. The chart shows only median values and does not reflect the wide variety of incomes and costs that individual households may have. For instance, a household with slow income growth during past 20 years would now be paying a higher share of its income in housing costs than other households. On the other hand, a household that bought a house in 1980 and has not moved may be paying a substantially lower share of its income in housing costs than other households.



In addition, a number of other factors can change the picture of affordability for a particular household. Households with more savings, higher incomes or more equity (owned property) may be able to afford higher housing costs. Particular houses that will meet a household's needs and desires may be more or less expensive than the median value. Lending criteria used by banks or mortgage companies may make it easier or more difficult for particular households to acquire a mortgage to buy a home. Also, the cost of borrowing money, including interest and any fees, may significantly change the affordability of housing. Lower interest rates, such as those of the late 1990s and early 2000s, permit a household with a mortgage to pay a smaller percentage of monthly housing costs in interest. Consequently, some households may be able to buy more expensive houses for the same monthly cost as a less expensive house at a higher interest rate.

According to the U.S. Census Bureau, over 30% of Seattle's renter households reported paying more than 35% of their income in rent in 2000, approximately the same as in 1990. A smaller, but increasing, portion of owners is paying more than 35% of their income in housing costs. Between 1994 and 2002, the average price paid for a home in Seattle increased by 74% to \$307,000.

Percent of Income Spent on Housing Costs	Owners		Renters	
	1990	2000	1990	2000
Less than 20 percent	60%	48%	28%	29%
20 to 24 percent	13%	13%	15%	15%
25 to 29 percent	9%	11%	13%	13%
30 to 34 percent	6%	8%	9%	9%
35 percent or more	11%	20%	31%	31%
Not computed	0%	1%	3%	4%

In the 1999 and 2001 citywide residential surveys, 80% of respondents felt that housing had become less affordable in the last two years. This is an increase over 1996 when 59% of respondents answered that housing had become less affordable over the last few years.

One of the Comprehensive Plan's key housing goals is to maintain the affordability of housing over the course of the Comprehensive Plan. The Comprehensive Plan's Housing Goal, HG4, seeks to "achieve a mix of housing types attractive and affordable to a diversity of ages, incomes, household types, household sizes, and cultural backgrounds."

In addition to providing subsidies for some housing, the City is continually reviewing its regulations to ensure that affordable housing continues to be built in the City. For example, in 1996, the City implemented a multifamily housing tax exemption program. This program provides tax relief for developers of multifamily projects in targeted urban centers.

Income distribution: Seattle's median household income rose 6.5 percent between 1989 and 1999, accounting for inflation.

Seattle's median household income in 1999 was \$45,736, up from \$29,353 in 1989. Median household income represents the midpoint; the income of half of the city's households is lower than the median and half are higher.

The map of 1999 median incomes (collected in the 2000 census) compares the median income calculated for each census block group in 1999 compare with the median for the city overall. Median household incomes are lowest in the areas shown in white—less than 50 percent of the city median (under \$22,868). The pale gray areas have higher median incomes, but still under the city's median (\$22,869 to \$45,736).

On the contrary, the darker gray areas indicate where 1999 median household incomes lie between the city median and 150 percent of that level (\$45,737 and \$68,604). In the black areas, median incomes are higher than 150 percent of the city median (over \$68,604).

The 1989 map allows us to compare the general patterns of income distribution in 1989 with those in 1999. However, comparisons of individual block groups over the decade may not be valid because the Census Bureau configured many census block groups differently for the 2000 census than they did in 1990.

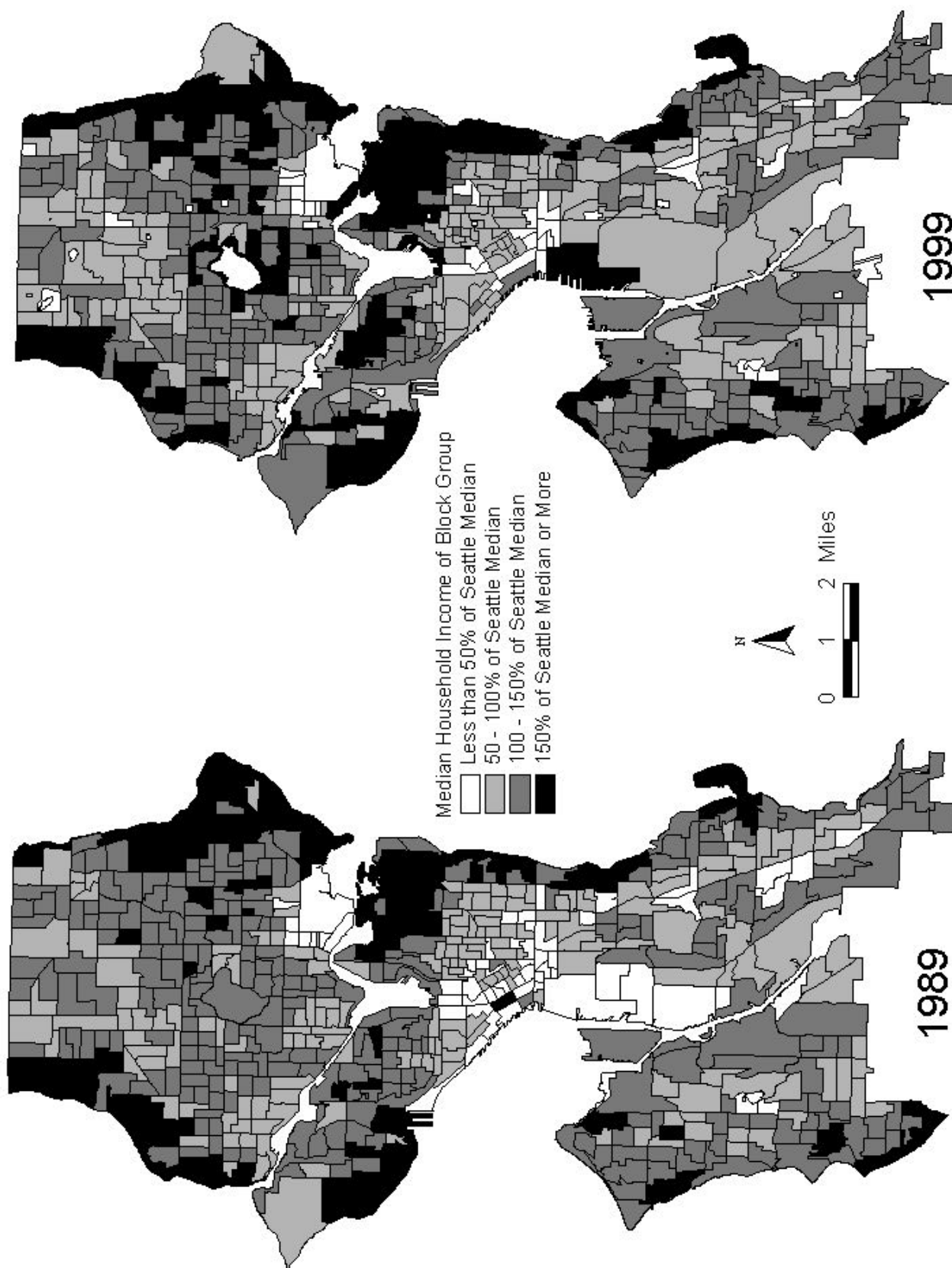
As in 1990, areas with median incomes below the city median were most common near downtown and the University of Washington and in parts of the Duwamish, Southeast and West Seattle, Ballard and north of 85th Street. Some of these lower income areas became more concentrated over the decade. This change is perhaps most notable north of 85th Street. Also, in West Seattle the areas with median household incomes below the city's median became more tightly clustered and shifted somewhat westward.

The areas with the lowest incomes in 1989 – under 50 percent of the city median – do not appear to have grown in any area of the city. The relative income of much of the central area improved from the lowest category to the next one (representing 50 to 100 percent of the city median). Smaller areas of Southeast Seattle had median household incomes below 50 percent of the city median in 1999 than a decade earlier – only a few scattered areas remain. Very few new areas have appeared in the city with median incomes at this lowest level.

As in 1989, the areas with median incomes 50 percent or more above the city's median were still most widespread along Lake Washington and Puget Sound. Many of the areas with the highest incomes in 1989 expanded over the decade to encompass more territory along the water in 1999. Also, additional areas of the city not bordering the water had median incomes above 150 percent of the city median in 1999 – most markedly near Green Lake and in Queen Anne.

The Comprehensive Plan Housing Element Policy H16 states that the city will: "Encourage greater ethnic and economic integration of neighborhoods in a manner that does not promote gentrification or the displacement of existing low-income residents from their communities."

Median Household Income Distribution by Census Block Group



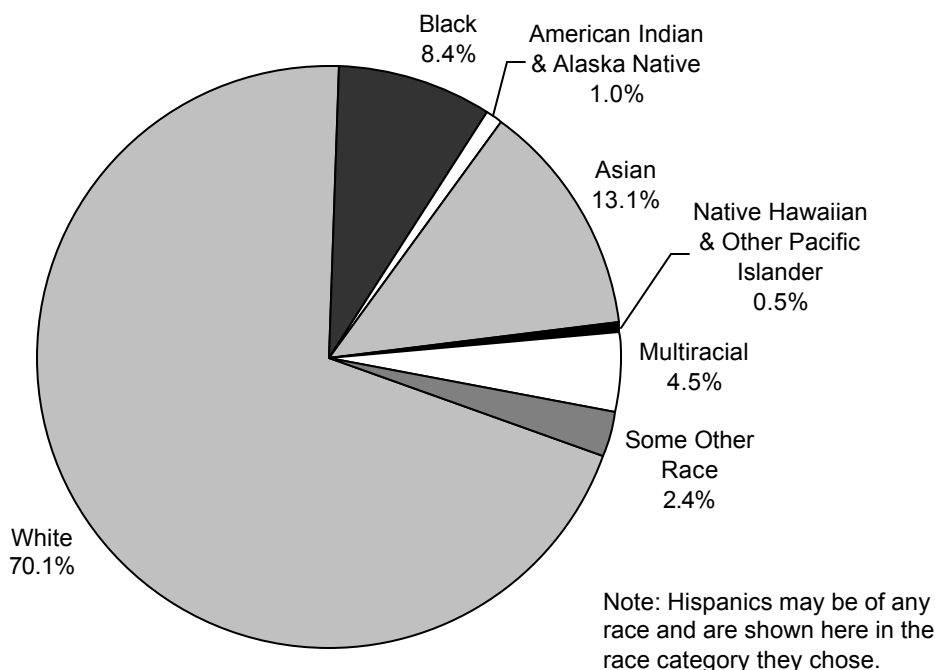
The City's neighborhood planning strategy encourages certain housing types, such as residential small lots, and promotes more efficient use of existing housing. As this strategy is implemented, more affordable units may be available throughout the city's neighborhoods. This will result in a richer mixture of income levels across the city.

In addition, the City has supported the Seattle Housing Authority's work to integrate their existing public housing communities. Communities, such as NewHolly, are being redeveloped from large concentrations of public housing to new communities which will house a broad range of households, including home owners.

Race and ethnicity: Seattle is more racially and ethnically diverse in 2000 than it was in 1990.

People of color¹ now comprise 32 percent of Seattle's population compared to 26 percent in 1990. Hispanics alone have increased their share of the population from 3.6 percent to 5.3 percent of Seattle's residents.

Seattle's Racial Diversity in 2000

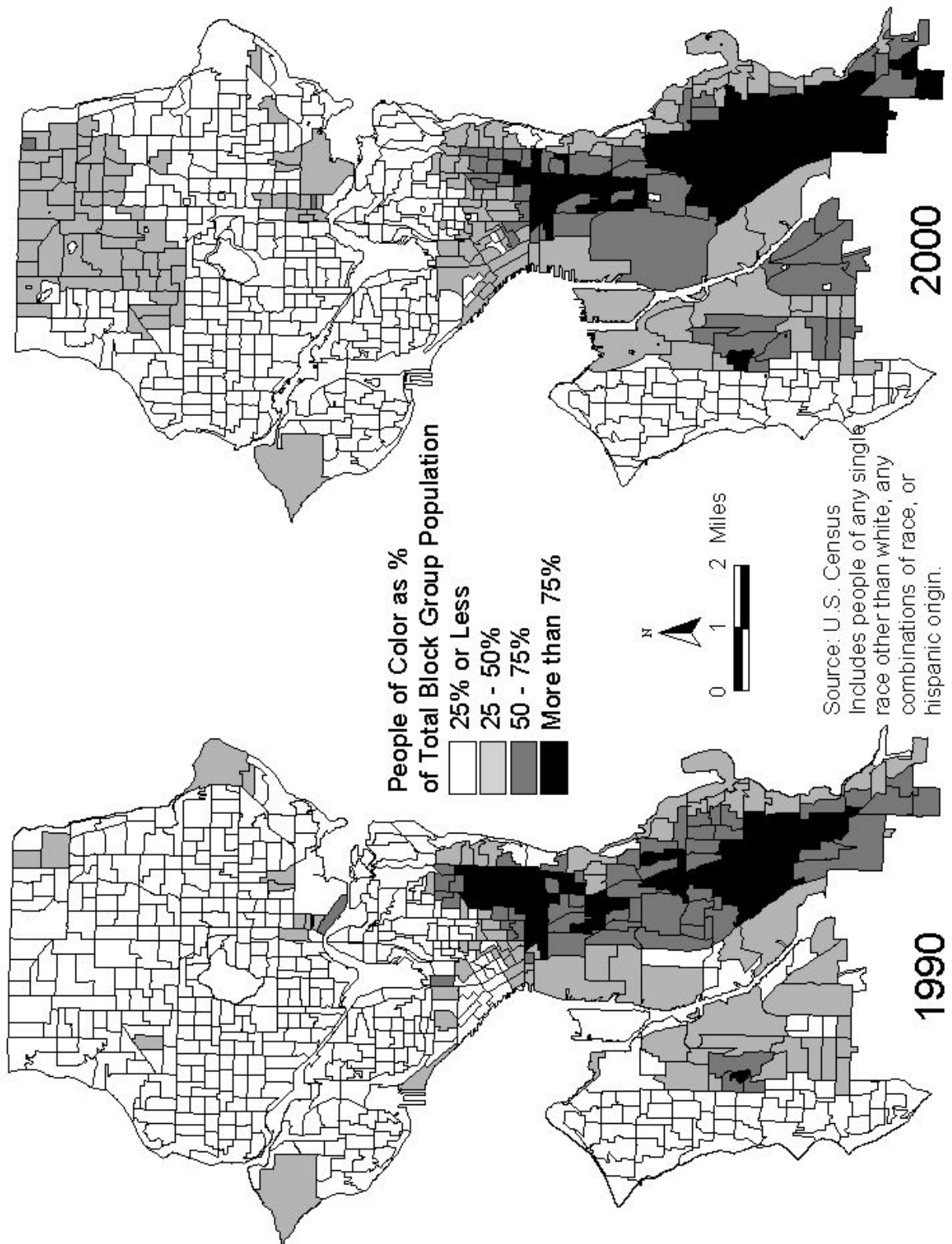


In larger areas of the city, people of color make up 25% or more of the population. As in 1990, people of color make up a larger share of the population in Southeast Seattle than in other parts of the city. Between 1990 and 2000, the areas in Southeast Seattle where 75 percent or more of residents were people of color expanded both to the west and to the east as well as south to the city's edge.

By contrast, in the Central Area, north of Yesler Street, the area where 75 percent or more of the population were persons of color shrank from 163 blocks in 1990 to 31 blocks directly in 2000. However, as people of color became less concentrated, they have moved into a larger portion of the city. In 1990, in most of the area northwest of Madison Street less than 25 percent of residents were persons of color. In fact, had the city been divided in two parts in 1990 – north and south of Madison Street, people of color comprised over a quarter of the population in only small isolated areas north of Madison Street. By 2000, Madison Street no longer appears as the approximate northern limit of the largest concentration of people of color. Instead, people of

¹ People of color refers here to those who identified themselves in the censuses as being of any race category other than white, any race in combination with white, or Hispanic/Latino.

People of Color Distribution by Census Block Group



color made up 25 to 50 percent of the population in 2000 in most of the area between Yesler Street and Mercer and Roy Streets.

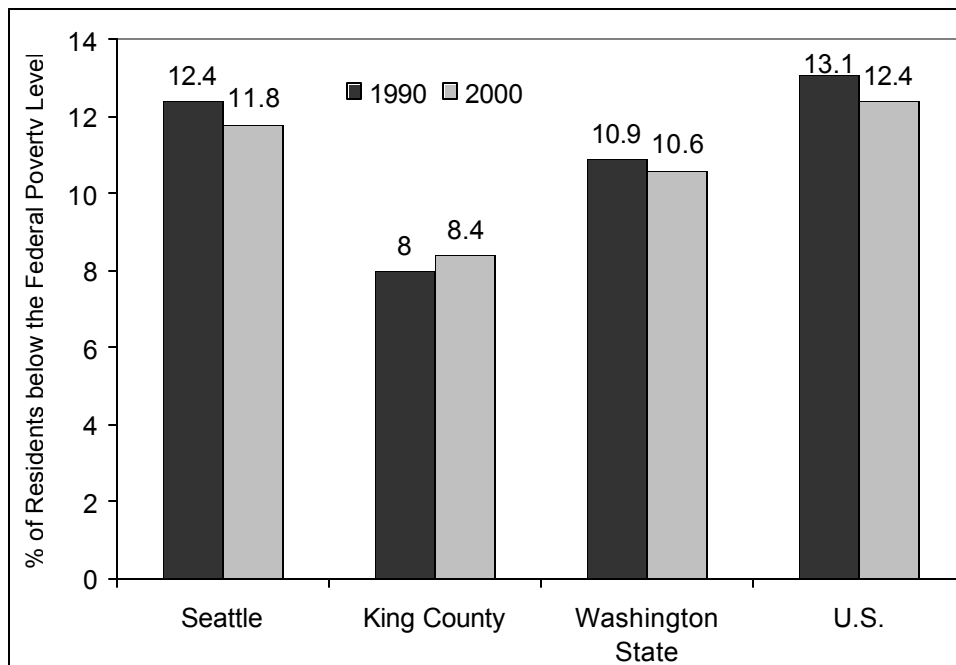
Also, in much of the area north of 85th Street and east of Third Avenue people of color now make up a quarter to half of the population. Still, in the vast majority of the area between Mercer Street and 85th, people of color constitute less than a quarter of the population. By contrast, the areas where people of color are 25 to 50 percent of the population have increased in size from 1990 to include a larger area near the University of Washington, Discovery Park, Belltown, Denny Triangle, and South Lake Union.

Concentrations of people of color became more distinct in West Seattle. Between 1990 and 2000, the areas where people of color were a majority of the population expanded slightly to the east, west, and south. Farther south, people of color now constitute a half to three-quarters of the population in Westwood-Highland Park, South Park, and the area west of South Park to Ninth Avenue. In nearly all of the remaining areas in West Seattle east of 35th Avenue Southwest, persons of color make up at least a quarter of the population. By contrast, people of color do not make up more than a quarter of the population in any area west of 35th Avenue Southwest.

Housing Element Policy H14 encourages greater ethnic and economic integration of neighborhoods within the city.

The City's Office of Civil Rights provides education and support to households and individuals experiencing discrimination, including households discriminated against because of their ancestry, color or race.

Population below the poverty level: The share of Seattle's population living in poverty



In 2000, 11.8 % of Seattle residents lived below the federal poverty level. This is a small drop from 1990, when 12.4% of residents lived below the poverty level. However, 3,000 more people are below the poverty level than in 1990. In addition, the poverty rates for citizens in the city range broadly depending on race. American Indians and Alaskan Natives in Seattle are most likely to be in poverty, with 30% of this group in poverty. Native Hawaiians and Pacific Islanders, and African Americans, Hispanics and Latinos also have poverty rates of over 20%. White residents of Seattle are least likely to be in poverty, with 8.2% percent of White non-Hispanic residents in poverty.

Although the percentage of persons in poverty dropped both across Washington State and the United States throughout the 1990s, the percentage of residents under poverty increased in King County between 1990 and 2000.

One aspect of the core vision in the Comprehensive Plan is of Seattle as a socially equitable society. To realize this vision, residents need sufficient income for basic needs--food, shelter, and health care. Poor people make daily choices between their needs for food, shelter, and health care.

When they are not able to meet their basic needs, the poor may not have the same ability as other citizens to take advantage of economic and educational opportunities. They may not be fully able to participate in the community. Without their participation, both the community and the poor are further impoverished.

Even under current budget constraints, the City provides direct funding to social service agencies to support Seattle's poor residents. Services provided range from emergency food and shelter, to rent and utility assistance to keep people safely in their homes.

Health care insurance coverage: Approximately 89% of Seattle residents between 18 and 65 have health care insurance.

This is a 3% increase since the period 1994-1996. Most Seattle residents currently have health insurance. However, eleven percent of residents between 18 and 65 do not have insurance.

A report developed for the Washington State Planning Grant on Access to Health Insurance found that 8.4% of King County's residents under the age of 65 did not have health insurance in 2000. Seattle's residents have a lower rate of insurance than King County as a whole. Over 70% of residents in the King County study received health insurance through their employer. Data specific to Seattle for employer-funded insurance are not available.

Goal HDG6 of the Comprehensive Plan Human Development Element is to "create a healthy environment...where community members have good access to affordable health care." Policy HD32 seeks to "improve the quality of and access to health care."

The City is King County's partner in funding the Seattle-King County Public Health Department (SKCPHD). SKCPHD runs and funds health clinics, which provide low-cost health care to those who meet income requirements. SKCPHD also links community members who are eligible to low-cost health insurance programs.

5. Environmental stewardship indicators

To further the core value of environmental stewardship, the Comprehensive Plan contains goals and policies for the ways the City can contribute to an improved natural environment. Because the environment does not stop at the city limits, being responsible for the environment means taking action to positively impact the regional, national and global environment.

The quality of our local environment is also closely connected with other Comprehensive Plan Core Values. These connections are reflected in the indicators that measure whether we are being good environmental stewards. Poor air and water quality and longer commute times may discourage companies from locating or staying in Seattle. They also make the city a less attractive place to potential workers, as well as a less healthful and enjoyable place for current residents.

Care for the environment today protects our future. The choices that the City and its citizens make have a direct effect on the environment. For example, use of motor vehicles is the leading contributor to local air and water pollution. We want future generations to enjoy the same quality of life that we do. The way we treat our natural resources may affect our children and future residents of Seattle even more than it affects us.

The indicators chosen to measure Environmental Stewardship are:

- Water quality
- Air quality
- Noise level
- Tree coverage
- Energy consumption
- Water use
- Recycling
- Commuting to work
- Transit ridership
- Alternative transportation facilities

Generally, the City's environment is showing some improvements. While water and air quality levels remain similar to past levels, noise pollution appears to be less of a concern to Seattle residents. Seattle's use of water and electricity per capita has dropped over the last few years. On the other hand, so has the rate of recycling. More residents are using means other than the car to get to work, and transit use is generally up. The City is providing expanded facilities for bicycles and high-occupancy vehicles such as buses.

Water quality: Water quality at beaches and streams appears to be improving.

Table 1: Water Quality for Swimming¹ at Lake Washington Beaches

	1998	1999	2001
Matthews Beach	Poor	Fair	Fair
Magnuson Park Offleash	Not Available	Not Available	Excellent
Magnuson Park	Excellent	Excellent	Excellent
Madison Park	Good	Excellent	Excellent
Madrona Park	Excellent	Excellent	Excellent
Mount Baker Beach	Good	Excellent	Excellent
Andrew's Bay Beach (Seward Park)	Excellent	Excellent	Excellent

Table 2: Shellfishability² at Marine Beaches

	1996-97	1999	2001
Carkeek	Poor	Poor	Poor
Golden Gardens	Poor	Fair	Fair
Shilshole Bay	Poor	Poor	Good
Magnolia Sites	Excellent to Fair	Fair	Very Good
West Point	Good	Good	Good
Elliott Bay	Poor	Very Good	Very Good
Alki Sites	Excellent to Poor	Fair to Poor	Very Good to Poor
Fauntleroy Cove	Poor	Poor	Poor
Lincoln Park	N/A	Excellent	Very Good

Table 3: Biological Integrity³ of Seattle's Streams

	1994	1996	1998	1999	2000	2001
Longfellow	N/A	Very Poor	Very Poor	Very Poor*	Poor	Very Poor
Venema	N/A	Poor*	Poor	Very Poor*	Poor	Poor
Taylor	Poor	Poor	Very Poor	Very Poor	Poor	Very Poor
Thorton South	Very Poor	Very Poor	Very Poor	Very Poor*	Very Poor	N/A
Thorton Main	N/A	Very Poor	Poor	Very Poor	Very Poor	Very Poor

¹ Measured by the presence of fecal coliform and e coli bacteria.

² Measured by the presence of fecal coliform bacteria.

³ Measured by using a Benthic Index of Biological Integrity. Biological integrity relates to the presence of organisms in the water and compares a regional baseline condition that reflects little or no human impact.

*Low insect numbers reduce the reliability of these numbers.

Water quality is important to Seattle. Jobs in marine-related industries, including fishing, depend on good water quality. Water activities, such as sailing and swimming provide recreation for Seattle residents and a reason for others to visit. Rivers, streams, and bays supply us with drinking water, fish and wildlife habitat and irrigation water. The listing of Chinook salmon as a federally endangered species has highlighted the importance of the quality of water in and around Seattle.

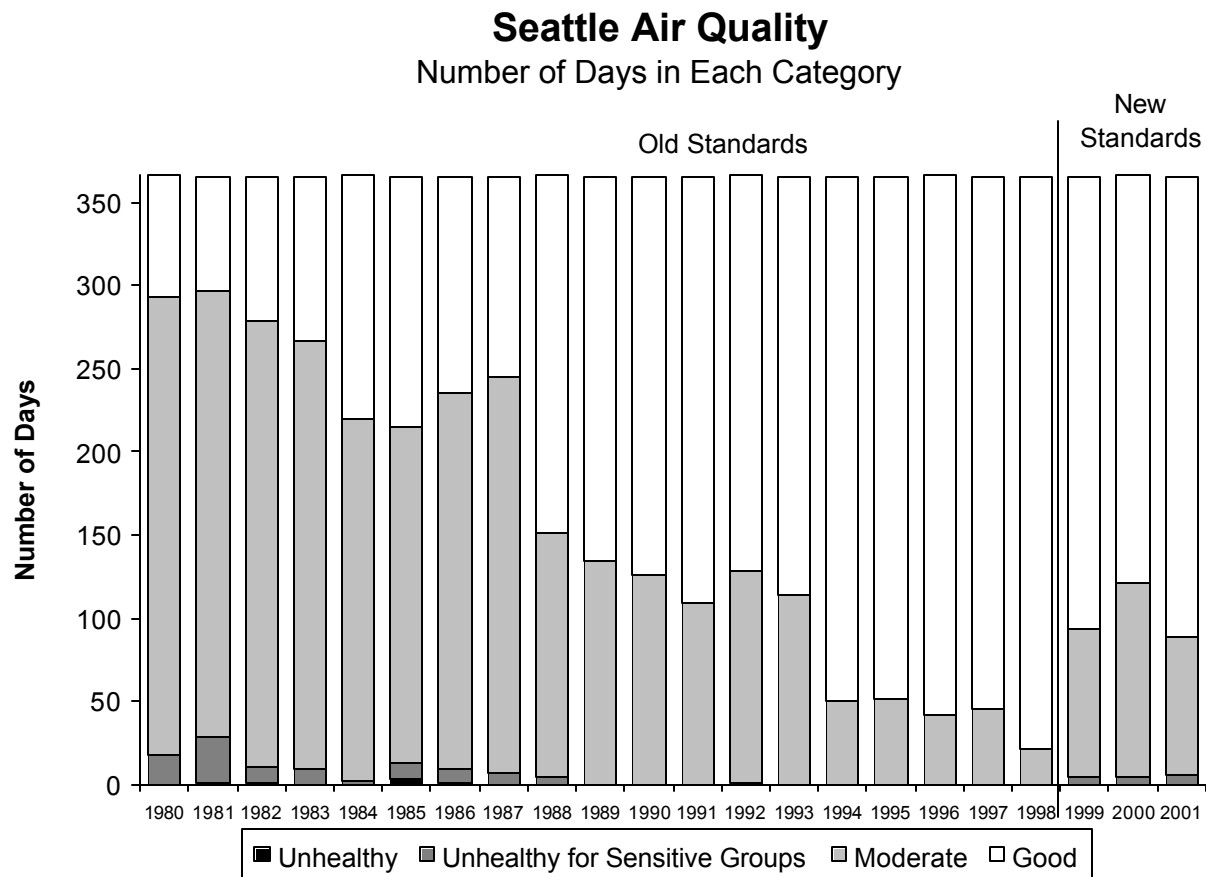
Growth in both households and jobs places increasing demand on our environment. A direct consequence of growth can be more polluted water such as when land development removes vegetation from stream banks leading to soil washing into streams.

The Comprehensive Plan's Environment Element's Goals EG6 through EG10 commit the City to improving environmental quality and reducing water pollution caused by motor vehicles. Rain can wash motor oil and other pollutants into our streams, lakes and bays from roadways, surface parking lots and other paved or developed areas. One strategy the Comprehensive Plan suggests is to try to increase the amount of plant cover and surfaces into which water can seep. By allowing water to seep into the ground, runoff from roads, rooftops and sidewalks decreases.

The City is actively working to improve water quality. Improving the quality of urban creeks, including Longfellow, Pipers, Thornton and Taylor Creeks became the goal of the Urban Creeks Legacy restoration and drainage improvement projects. These projects aim to preserve fish habitat and prevent floods that damage streamside properties by reducing the impact of heavy storm flows in the creek.

Other City projects include changing the landscaping techniques on City-managed property to eliminate the use of the most potentially hazardous herbicides and insecticides and to achieve a 30 percent reduction in pesticide use over 1999 levels. The City also promotes techniques for home gardeners to develop gardens that work with natural processes to grow healthy plants with minimal irrigation, fertilizer and pesticides.

Air Quality: After many years of improving air quality, Seattle had approximately 275 good air quality days in 2001.



The Puget Sound Clean Air Agency (PSCAA) monitors different kinds of pollutants in the Puget Sound area and Seattle. The graph above shows that the number of days with good air quality in Seattle grew from fewer than 315 in 1994 to almost 350 in 1998. There have been no “unhealthy” air quality days in Seattle since 1984. In 1999, a new set of federal standards was introduced. At least in part as a result of the changed standards, the number of good air quality days has since fallen to between 250 and 275.

PSCAA’s air quality monitors measure several pollutants in Seattle air, including lead, sulfur dioxide, carbon monoxide, and other particulate matter. According to a study by PSCAA, diesel soot accounted for 75% of air-pollution induced cancer risk from in Seattle. The State Department of Ecology has estimated that 57% of air pollution in the state is caused by car exhaust. Exhaust contains numerous toxic pollutants, including carbon monoxide and benzene. In summer months, car exhaust, other chemicals and higher temperatures react together to form ground-level ozone, commonly known as smog. Although the number of vehicle miles traveled through Seattle continues to increase, some progress has been made in reducing the chemicals from motor exhaust.

Poor air quality can be a significant problem for people, buildings and vegetation. Polluted air can cause health problems and damage to building materials. It affects trees and other living organisms. The U.S.

Forest Service and the National Park Service report that ozone has damaged trees, moss, and other vegetation in Mt. Rainier National Park, in Cascade forests, and in other natural areas. Emissions that harm local air quality can also contribute to global climate change. Automobile emissions are one of the greatest sources of greenhouse gases in our region.

The Comprehensive Plan's Environment Element contains a number of policies focused on improving the quality of Seattle's air and reducing greenhouse gas emissions. Some of the City's strategies for cleaner air and reduced greenhouse gas emissions are:

- supporting regional growth management activities that reduce reliance on cars (E11),
- promoting the use of motor vehicles with cleaner-burning alternative-fuel engines (E12), and
- identifying opportunities to eliminate the purchase of fossil-fuel burning sources of electricity (E14).

Goal TG2 of the Transportation Element of the Comprehensive Plan calls for action to reduce and/or mitigate air, water, and noise pollution from motor vehicles. Indicators of vehicle miles traveled, commuting to work, transit ridership and alternative transportation facilities also relate to how much we drive our cars. Many goals and policies in the Transportation Element relate to reducing the use of single-occupant cars and promoting other means of transportation. These range from encouraging the development of pedestrian and bicycle facilities to increasing transit ridership. The urban village strategy of the Comprehensive Plan aims to reduce the distance traveled between homes, jobs, services, and amenities. If this is successful, one result will be continued good air quality.

The City is undertaking a number of other activities aimed at improving air quality and reducing the emission of greenhouse gases resulting from City activities. Seattle City Light has committed to the long-term goal of meeting all of Seattle's electricity needs with zero net release of greenhouse gas emissions. The City is actively reducing emissions from the more than 4000 vehicles it owns: cars, trucks, backhoes, mowers, fork lifts, etc. Strategies include increasing the average fuel economy of the fleet, encouraging employees to use the bus or to carpool or teleconference instead of driving to business meetings and increasing the use of cleaner, alternative fuels. In addition, the City, along with several neighboring local jurisdictions and the Puget Sound Clean Air Agency, is taking aggressive steps to cut toxic emissions from its diesel fleet.

Noise level: between 1996 and 2001 the percentage of citizens who see noise as a major problem decreased.

	Noise as a major problem	Noise as a minor problem
1996	17%	43%
1997	13%	44%
1999	14%	44%
2001	15%	43%

Source: Citywide Residential Surveys

However, concern over noise has been slowly increasing since 1997. The perception that noise is a problem varies based on where survey respondents live. For instance, in 2001, residents in the central east section of the city were most likely to describe noise as a major problem. Residents of northwest Seattle were least likely to describe it as a problem.

Transportation—local street traffic, airplane traffic and freeway traffic—was the most common source of problem noise according to the 2001 survey. People, animals and stereos were other frequently mentioned sources of noise.

The perception of noise as a problem is relevant to several Comprehensive Plan goals. Increased traffic noise may accompany increased growth. The urban village strategy will result in people living more densely and closer to where they work, shop and play. That could lead to more people being exposed to higher levels of noise. Strategies in the Transportation Element, which seek to reduce the use of single-occupancy vehicles over time, complement the urban village strategy, and could reduce the number and noise of individual vehicles on residential streets in urban villages. The Transportation Element also contains a goal of reducing noise pollution from motor vehicles (Goal TG2).

The Transportation Element also seeks to “preserve and improve commercial transportation mobility and access” (TG21) and to “Maintain Seattle as the hub for regional goods movement and as a gateway to national and international suppliers and markets” (TG22.) Truck noise may be an unfortunate but real indicator of economic development and jobs. Airplane noise, too, may be the result of thriving commercial air transport or of tourism, which brings outside capital to Seattle hotels, restaurants, cultural venues, and retail establishments, along with jobs for Boeing employees.

Tree coverage: The number of street trees in Seattle has increased since 1992.

According to a report on trees in Seattle prepared by the Cascadia Consulting Group in 2000, Seattle has approximately 139,000 street trees, up from 90,000 in the last street tree inventory completed between 1990 and 1992. In addition, there are 115,000 park trees in or near landscaped areas, and at least another 250,000 to 400,000 trees on residential lots. In 2000, the city has approximately 6,800 acres (10.67 sq. mi.) of woodland canopy, of which nearly half is in the city's park system. These trees provide an average canopy cover of 25 percent for the entire city (including woodland areas) and 15.5 percent for the city's residential areas.

In late 1997, the City added goals and policies to the Comprehensive Plan regarding tree preservation and enhancement. Goals in the environment element include:

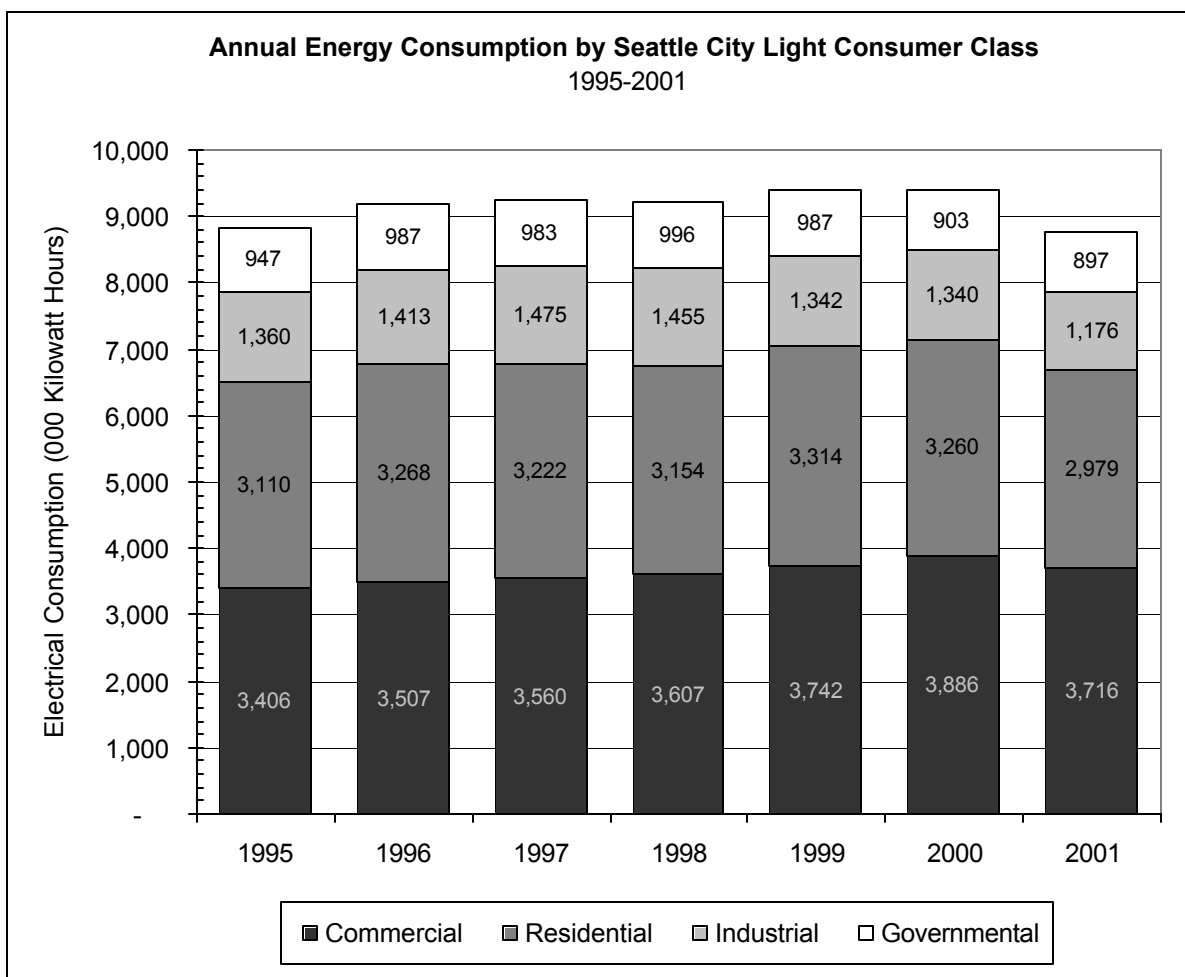
- “protecting the habitat of native and migratory wildlife by ... providing for the growth of native species of trees,”
- achieving a “net increase of healthy, diverse tree cover throughout the city,” and
- protecting trees of “significant historical, cultural, horticultural, environmental and aesthetic value” (EG17, 19, and 20).

The City has a number of programs in place that are intended to encourage the preservation of existing trees or to assist in the planting of new trees throughout Seattle. One program makes trees available to Seattle neighborhood groups. Neighborhoods can request trees from the Tree Fund for planting strips on residential streets or city parks.

In addition to planting new trees, the City protects existing exceptional trees. The Tree Protection Ordinance adopted in 2001, protects existing trees more than six inches in diameter from removal unless the tree is deemed hazardous or is being removed in conjunction with development. For new development, buildings may need to be designed, and some development standards modified, to avoid removing trees. Additional protection is given to trees more than two feet in diameter.

A Heritage Tree program identifies special trees. Trees are selected to be Heritage Trees based on criteria such as age, size, type, historical association, or horticultural value. When development occurs, the City seeks to retain existing large trees and has requirements for the planting of new trees.

Energy consumption: Use of energy by all types of consumers dropped in 2001.



Energy conservation is one way to serve more electricity customers without incurring the environmental and fiscal impacts of building new facilities to generate power. While some new source of electrical energy may be inevitably required, energy conservation that promotes more efficient use of existing sources can delay and reduce the total environmental impact of providing power.

Until 1990, residential customers in the Seattle City Light service area accounted for the largest amount of electricity used compared to commercial, governmental and industrial customers. Therefore, increased energy efficiency among residential customers could lead to significant energy savings for City Light. The amount of electricity used by residential customers decreased from a high of 12,900 kilowatt hours per customer in 1982 to 10,300 hours per customer in 2000.

The commercial customer class surpassed the residential class as the largest consumer of electricity in 1992. In this sector over the last five years, both the number of customers and the amount of energy consumed by the average customer have continued to grow. During the high-tech economic boom of the late 1990s and early 2000, high-tech and bio-technology business ventures grew tremendously, spurring greater demand for electricity to serve “wired” offices, laboratories, and concentrations of

computers and telecommunications equipment. Average annual consumption per commercial customer between 1995 and 2000 grew from 114,000 kilowatt hours to 126,000 kilowatt hours, a 10% increase.

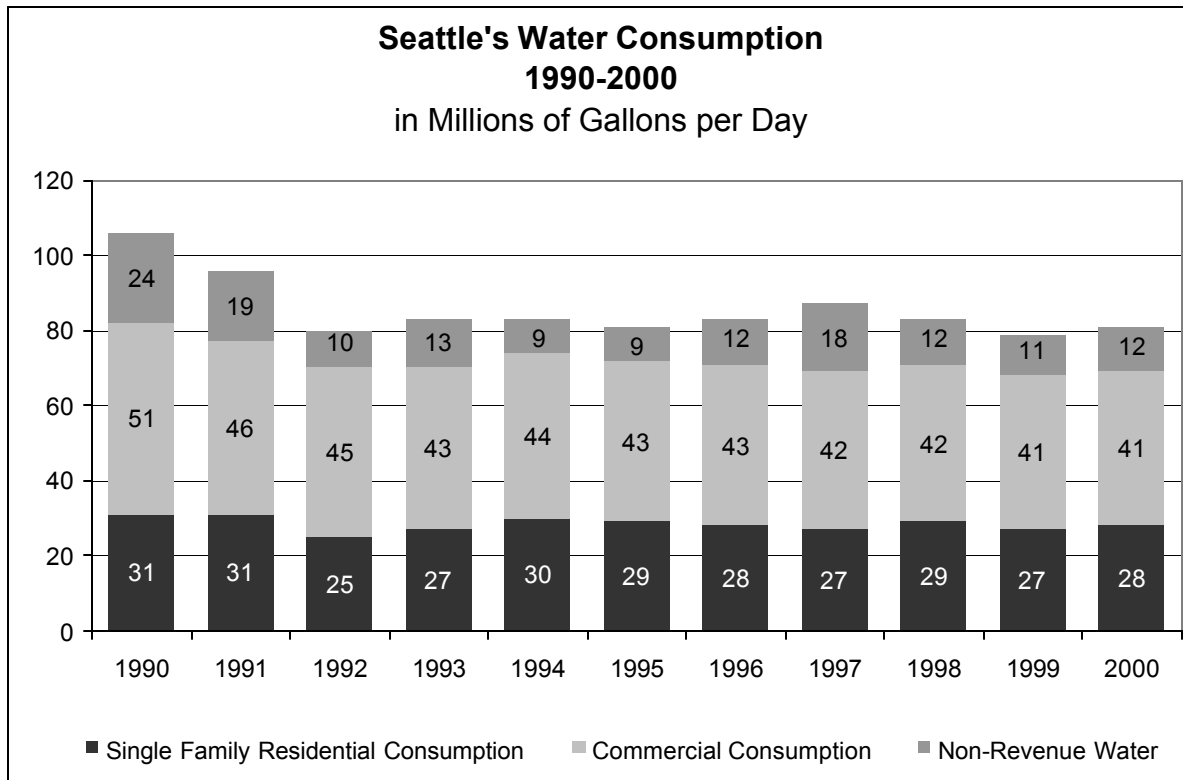
In 2001, with an energy crisis affecting the city, all customer classes conserved, with the greatest decrease in use by industrial customers. Energy demand in 2001 fell by seven percent overall.

One aspect of environmental stewardship is the efficient use of our resources. The Comprehensive Plan recognizes this in Goal UG3 of the Utilities Element, which states that the City will “maximize the efficient use of resources by utility customers.” Policies U7 through U9 of that Element recognize the need for environmental stewardship with resources such as electricity.

The City’s commitment to encouraging efficient use of resources also relates to economic opportunity and social equity. If utility bills are controlled through efficient use of energy, commercial customers will find Seattle an attractive place to do business. Residential customers, especially those at lower income levels, will spend a lower percentage of their income on electricity bills.

Seattle City Light has a number of programs that encourage energy conservation among each of its customer classes, including incentives for using energy-efficient lighting and equipment. The City is also committed to using sustainable building techniques in its own construction and encouraging the use of sustainable building techniques by others. These techniques can reduce the impacts of new construction on the environment, and can reduce the amount of energy consumed by a building over its lifespan.

Water use: water consumption has stayed constant between 1994 and 2000.



The graph above shows changes in water use since 1990. While Seattle's population grew by 5% between 1994 and 2000, water use has remained steady.

Seattle's biggest drop in water use occurred in the drought year of 1992, when water demand dropped 22%. Water use has remained nearly the same ever since. The following factors have led to this decrease in consumption:

- A rate structure that has higher rates in the summer peak season,
- Aggressive water conservation programs,
- New state plumbing codes for water fixtures, and
- Improvements in water facilities (i.e., lining leaky reservoirs, reducing unnecessary reservoir overflowing, main flushing, etc.).

Seattle's water consumption can be divided into three categories: single-family residential, commercial, and non-revenue water. Non-revenue water (water that is used by the utility or is lost through leaks in the system) has been cut by more than half during the past decade. The reduction in billed consumption has also been considerable. Residential and commercial customers have both cut their demand by more than 15%. As Seattle's population has been growing at the same time, the reduction in per capita terms is even greater. Per capita water use has dropped 25% over the last decade.

The Comprehensive Plan's Utility Element (UG3) commits the City to promoting efficient use of resources. The Land Use Element encourages growth to occur more densely in areas where utility infrastructure is already in place. This is a way of ensuring that water use will most efficiently serve the maximum number of people. Homes on small lots or multi-family buildings tend to use less water per household than homes with new landscaping and larger lots.

Seattle Public Utilities provides a number of programs that help to reduce water use by residents and businesses. For example, the City provides rebates to customers who buy low-water use clothes washers and toilets. All commercial water customers are eligible for free technical assistance to help improve operations and install new equipment. Rebates of up to 50% of qualified project costs are provided to businesses for water savings equipment or landscaping improvements designed to reduce water use. In addition, the City's focus on sustainable building introduces opportunities to reduce water use in new buildings.

Recycling: Seattle's recycling rate has declined since 1995.

In 2000, Seattle recycled 40% of its total waste. Single-family residents recycled 58% of their waste and businesses recycled 42%. The indicator shows a decline since 1995, when 44% of waste was recycled. Single-family residents have cut the amount of waste that they recycle by two percentage points. Businesses have reduced their recycling by six percentage points.

For solid and hazardous waste, reduction, reuse, and recycling control how much waste citizens and companies generate. Reduction is the decision not to buy a product or to buy it with the minimum of packaging. Reuse is the decision to use a product as many times as possible before buying more. Recycling is making sure some or all of a product is remanufactured into a new product.

Seattle has enjoyed an international reputation as a model for recycling programs. When the City's Solid Waste department surveyed Seattle residents in 1995 about their attitudes about recycling, 80% of the respondents said waste prevention was very or extremely important and that they would like to recycle even more. Waste prevention was at least somewhat important to 94% of respondents.

The Puget Sound region is experiencing growth, and growth begets garbage. Despite the growth, the tons of garbage generated in Seattle that are placed in landfills have declined from 503,000 tons in 1995 to 476,000 tons in 2000. This may indicate that residents and businesses in Seattle are finding ways to reduce and reuse their waste. As part of a growing region, the City has made a commitment to more efficient use of resources and the promotion of a more sustainable lifestyle. The Utilities Element of the City's Comprehensive Plan articulates this commitment through encouraging recycling and waste reduction.

Seattle Public Utilities provides recycling free to Seattle residents and those small businesses that generate small amounts of garbage. Commercial providers provide recycling services to larger businesses. Other City programs, such as "Use it Again, Seattle," provide opportunities for citizens to exchange unwanted items ensuring their reuse.

Commuting to work: Despite progress, the City is not meeting its goals for getting people out of their cars.

Means Seattle's Residents* Used to Commute to Work

	% of Workers Age 16 and Over			
	1990	2000	2000 Goal	2010 Goal
Alone in car, truck or van	58.7%	56.5%	51%	35%
Carpooling in car, truck, or van	11.8%	11.2%	12%	13%
Public transportation, including taxicabs	15.9%	17.6%	20%	27%
Walked	7.2%	7.4%	8%	10%
Bicycling and other means	2.5%	2.7%	5%	9%
Worked at home	3.8%	4.6%	4%	6%

Sources: U.S. Census Bureau, 1990 Census and Census 2000.

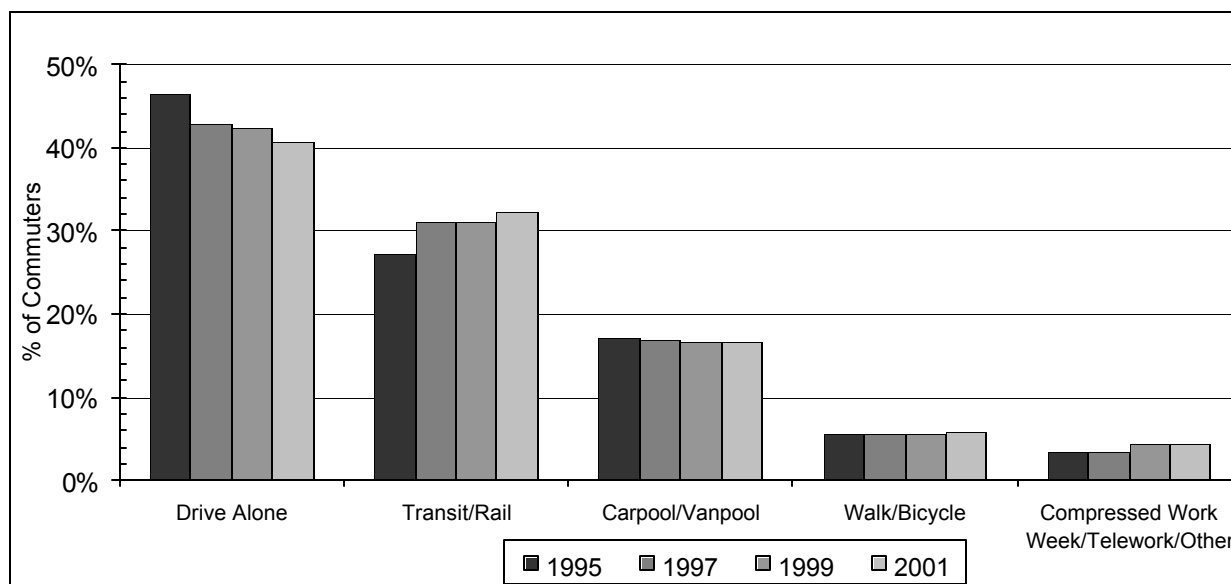
The Comprehensive Plan has a goal to “reduce the use of the car over time” (TG6). It seeks to shift commuters to public transit, walking, bicycling and other means of getting to work. U.S. Census Bureau data show that in 2000 a smaller share of Seattle residents drove alone or participated in carpools to commute to work than in 1990. The City’s goal of only 51% (policy T10) of workers driving alone to work, however, has not been met.

However, with increases in population, 14,000 additional residents drove alone to work in 2000. In order to meet the City’s 2000 goal, 17,600 workers would need to switch from driving alone to using another means of getting to work.

In 2000, 10,000 more Seattle residents took public transit to get to work than in 1990. In addition, 4,000 additional residents worked at home. There were slight increases in commute trips by bicycling and walking.

The average time residents of Seattle spent commuting to work increased by about two minutes between 1990 and 2000. By 2000, the average resident took almost 25 minutes to commute to work in the morning, up from 23 minutes a decade earlier. Part of this increase may be due to longer trips to work: 26% of Seattle residents now work outside the city, compared to 21% in 1990. Another part of the increase may be due to increased transit use. The commute trips of transit riders generally take longer than the trips of other commuters. A third cause of increased travel times may be increased congestion on streets and highways.

Means of Travel to Work of the Employees of Seattle's Major Employers



Source: King County Metro Commute Trip Reduction Data

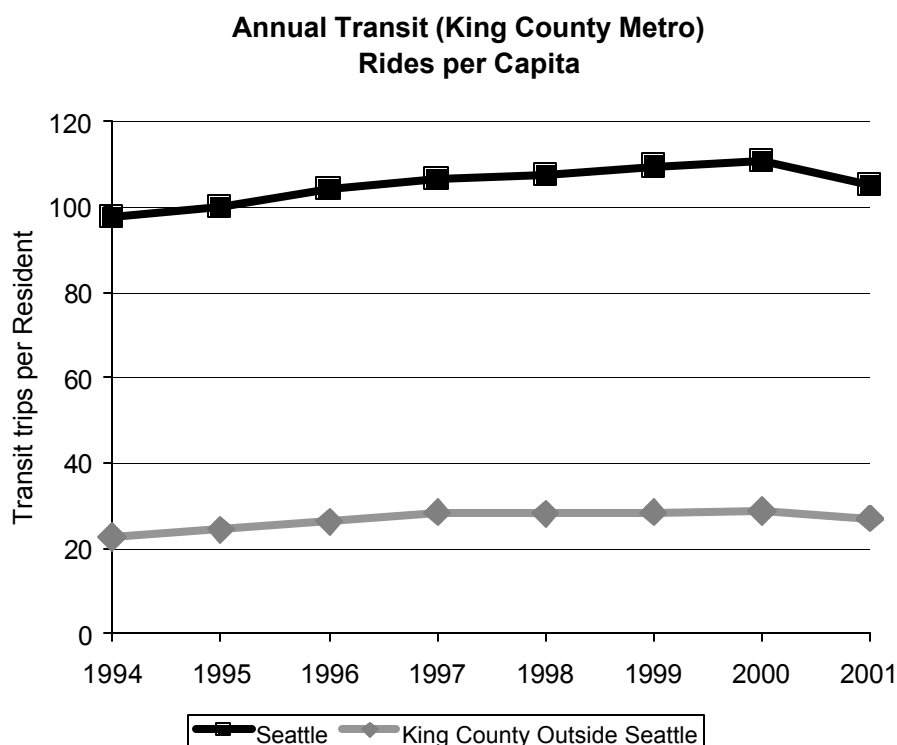
Employers in the city are involved in reducing the commute trips that their employees make. Over 270 employers in Seattle are involved in trip reduction programs that provide incentives for employees to find an alternative to driving to work in a single occupant vehicle. These incentives may include providing reserved parking spaces for carpools and vanpools, subsidizing transit fares, allowing employees to work a compressed work week schedule or telecommute, providing secured bicycle storage for bicyclists, or other encouragements.

Information from these employers presents additional information about how the commute to work is changing. Employers with commute trip reduction programs in place report decreases in the number of employees who drive alone or carpool. The number of employees who use public transit, walk, compress their work week so that they commute on fewer days or work from home increased from 52% to 59% between 1995 and 2001.

Transportation is the biggest source of air pollution overall. Driving to work alone pollutes the environment more than any other mode of transportation when measured on a per capita basis. If fewer people drove single-occupancy vehicles, there would be less air and water pollution. Another effect of using single-occupancy vehicles is roadway congestion. The 2001 citywide residential survey indicated that traffic is the most important problem for Seattle citizens.

“Way to Go, Seattle” is a City initiative to show people they can save money and make their communities more livable by making more conscious transportation choices, just as they do now with recycling and water conservation. Car Smart is a pilot program that offers a small number of households in Seattle an economic incentive to give up their “extra” car.

Transit ridership: A slight increase over 1994 ridership levels.



Transit ridership per capita has generally been increasing since 1994 for all of King County. Transit ridership per capita remains almost four times higher in Seattle than elsewhere in the county. Between 1994 and 2001, the annual number of trips taken by individual riders on Seattle bus routes increased approximately 13%, from 53 million to almost 60 million trips a year.

Transit ridership rises and falls depending on the level of transit service that is available, the cost of gasoline and the number of jobs in an area. Transit ridership probably fell in 2001 because of a decline in employment in the Seattle area in 2001.

In the citywide residential surveys, citizens have commented on whether it had become easier to get around by public transportation in the last several years. In 1996, 79% of the respondents said that it had improved or stayed the same. In 1997 and 1999, 83% of the respondents to the survey said that public transit had either improved or stayed the same. In 2001, the percentage of respondents stating that public transit had either improved or stayed the same dropped to 72%.

Goals TG4, TG5, TG6, and TG3 of the Transportation Element state that the City will encourage development of transportation alternatives to single occupancy vehicles, including transit. The use of less polluting alternatives to single-occupancy vehicles helps improve the environment, and the use of transit by Seattle residents can reduce vehicle congestion. Transportation Element Policy T10 includes goals for public transit work trips and non-work trips for Seattle residents.

Increased transit ridership is often associated with more dense concentrations of people, and transit service is more cost-effective if riders are concentrated in dense areas. The City's urban village strategy

encourages population and employment growth in already dense areas, which will help make transit more efficient to provide because of increased concentrations of potential riders and destinations.

Alternative transportation facilities: The City has expanded facilities for transit and other high-occupancy vehicles and bicycles.

Alternative Transportation Facilities in Seattle

	1996	2002
HOV or Transit-Only Lanes	35.8 miles	37.6 miles
Multi-Purpose Trails	28.1 miles	33.5 miles
Streets with Bike Lanes	15.1 miles	16.3 miles

In addition, the city has

- 2,000 miles of sidewalks and walkways,
- 463 public stairways, and
- an additional 75 miles of signed bike paths.

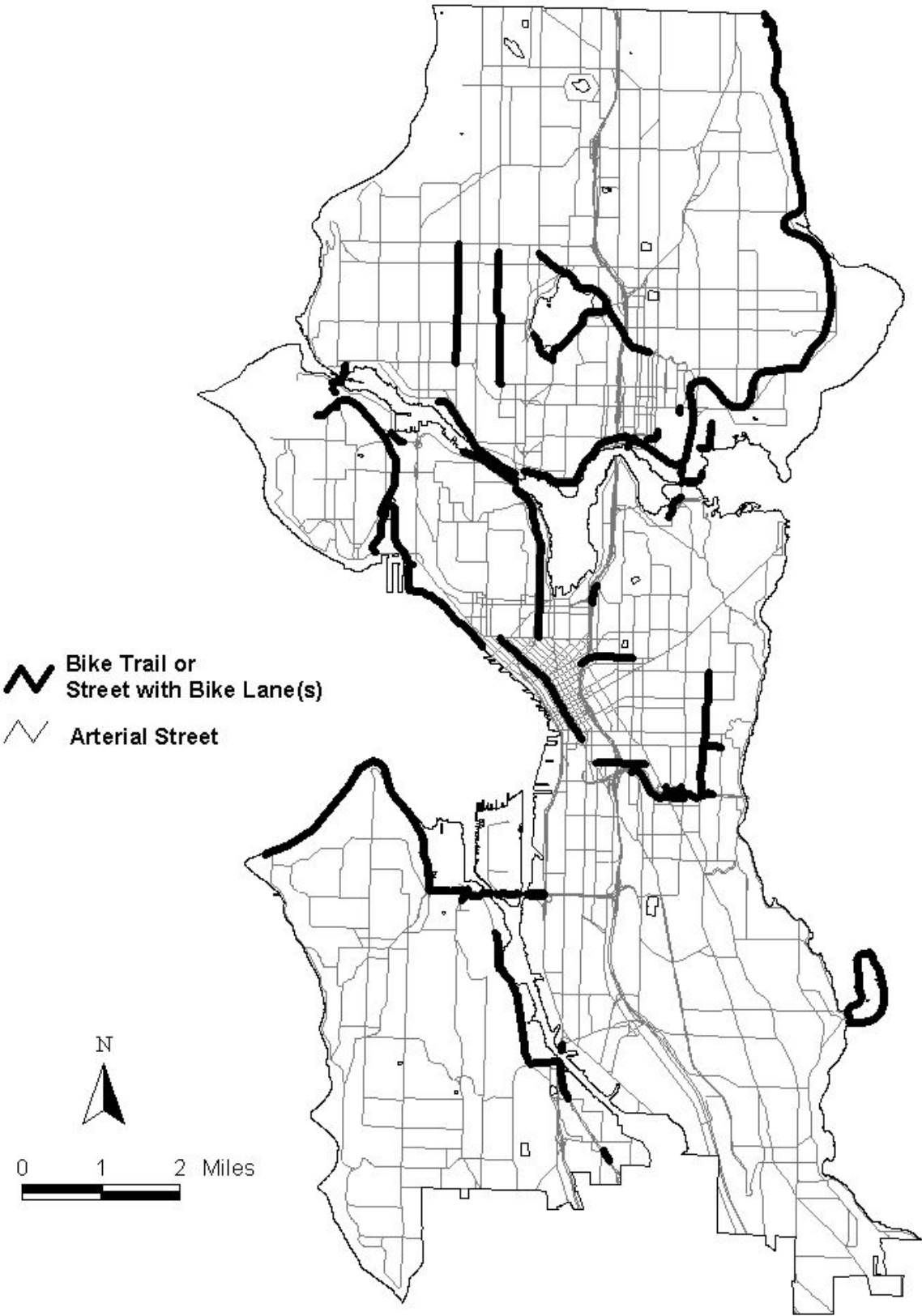
HOV lanes, which are reserved for carpools, vanpools, and public transit, include lanes on interstate freeways, state highways, and some lanes on city streets during rush hour. Transit only lanes include the bus tunnel, the E-3 busway and bus-only lanes on arterial streets and highways. Since 1994, transit-only or HOV lanes have been built along Aurora Avenue North, Howell Street downtown and the West Seattle Freeway

King County Metro, Sound Transit, Pierce Transit, and Community Transit provide most of the transit vehicles that run in the city. Since the adoption of the Comprehensive Plan, commuter rail has been added to the options residents of south King County and Pierce County have for commuting to work in Seattle. Future improvements include a light rail system and monorail through Seattle.

The urban trails network includes multi-use trails, bike lanes, bike routes, arterials with wide shoulders, and pedestrian paths. Since 1994, new trails, new bicycle lanes and new signed bicycle routes have been added in areas throughout the city, including in Ballard, Beacon Hill, Downtown Seattle, Greenwood, Crown Hill, Judkins Park/North Rainier, Rainier Beach, West Seattle and Fremont.

This measure generally tracks the supply of the facilities needed for residents and employees to travel through Seattle using transportation modes other than automobiles. However, the citywide residential surveys provide some data about whether or not these facilities are actually improving transportation choices. The surveys have asked the public about the ease of getting around Seattle by bicycle and on foot. Although these opinions necessarily include many subjective factors, public perception is one measure of the effectiveness of the City's investment in alternative transportation facilities. Perceptions of the ability to get around on foot and bicycle appear to have remained generally the same over the last five years, although fewer residents are noticing improvements in their ability to get around.

Bike Lanes and Trails



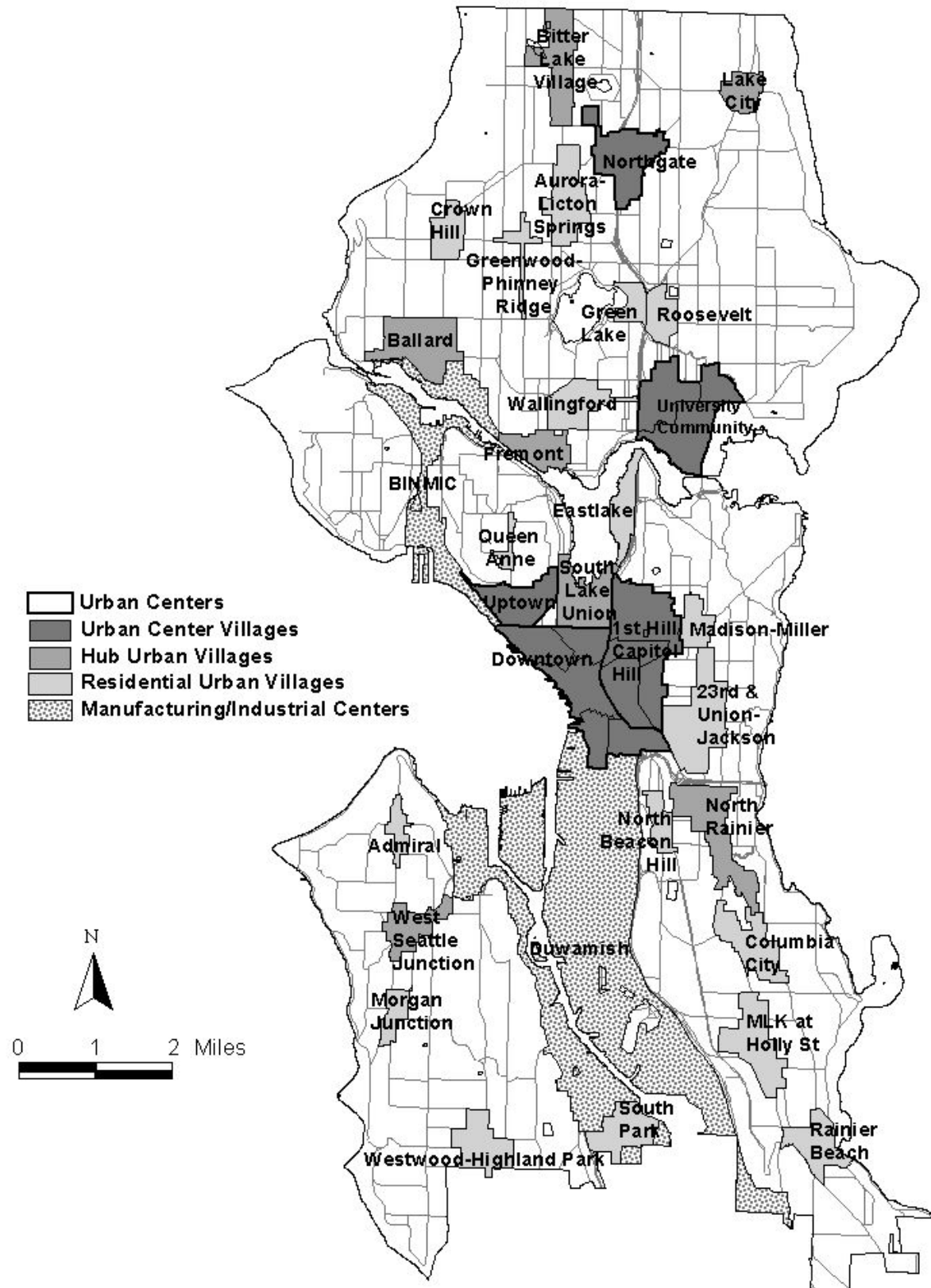
	Ability to get around on foot	Ability to get around by bicycle
1996 Citywide Residential Survey	66%: good or very good 25%: improved	(question not asked)
1997 Citywide Residential Survey	75%: good or very good 16%: improved	34%: improved
1999 Citywide Residential Survey	71%: good or very good 12%: improved	60%: good or very good 26%: improved
2001 Citywide Residential Survey	70%: good or very good 12%: improved	60%: good or very good 23%: improved

Goal TG5 of the Transportation Element states that the city will “provide a range of viable transportation alternatives, including transit, bicycling and walking.” These indicators also relate to Goals TG1, TG2, and TG3, which promote improved environmental quality and more energy-efficient, less polluting means of travel. Transportation Element Policy T10 sets goals for work trips and non-work trips by Seattle residents for different modes of transportation. These indicators are a way of measuring our success in achieving those goals.

APPENDIX 1: Net Housing Unit Growth in Urban Centers and Villages

	Net Units Built 1995-2002	20-Year Growth Target (1995- 2015)	% of Growth Target Achieved	Unbuilt units in Issued Building Permits*
Urban Centers	8,231	26,700	31%	1,449
1st Hill/Capitol Hill Urban Center	2,040	5,540	37%	410
<i>12th Avenue</i>	836	540	155%	2
<i>First Hill</i>	412	2,400	17%	161
<i>Capitol Hill</i>	400	1,980	20%	87
<i>Pike/Pine</i>	392	620	63%	160
Downtown Urban Center	4,641	14,700	32%	719
<i>Belltown</i>	2,752	6,500	42%	248
<i>Chinatown-International District</i>	524	1,300	40%	57
<i>Commercial Core</i>	1,011	1,300	78%	62
<i>Denny Triangle</i>	293	3,500	8%	306
<i>Pioneer Square</i>	61	2,100	3%	46
Northgate Urban Center	168	3,000	6%	0
University Urban Center	648	2,110	31%	130
<i>University District Northwest</i>	528	1,630	32%	-18
<i>Ravenna</i>	139	480	29%	147
Uptown Urban Center	734	1,312	56%	190
Hub Urban Villages	2,108	9,000	23%	1,424
Ballard	407	1,520	27%	477
Bitter Lake Village	203	1,260	16%	72
Fremont	168	820	20%	142
Lake City	471	1,400	34%	63
North Rainier	118	1,200	10%	21
South Lake Union	370	1,700	22%	371
West Seattle Junction	371	1,100	34%	278

Urban Centers and Villages



	Net Units Built 1995-2002	20-Year Growth Target (1995-2015)	% of Growth Target Achieved	Unbuilt units in Issued Building Permits*
Residential Urban Villages	3,311	9,000	37%	651
23rd & Union-Jackson	544	900	60%	239
Admiral	212	340	62%	1
Aurora-Licton Springs	336	900	37%	50
Columbia City	50	740	7%	-105 ¹
Crown Hill	47	310	15%	1
Eastlake	289	380	76%	52
Green Lake	93	400	23%	17
Greenwood-Phinney Ridge	177	350	51%	243
MLK at Holly St	240	800	60%	-124 ²
Madison-Miller	496	400	62%	164
Morgan Junction	38	300	13%	5
North Beacon Hill	36	550	7%	19
Queen Anne	69	300	23%	15
Rainier Beach	71	740	10%	8
Roosevelt	56	340	16%	5
South Park	74	350	21%	1
Wallingford	400	200	200%	22
Westwood-Highland Park	83	700	12%	38
Outside Centers and Villages	4,875	15,300	32%	1,836
Total Citywide Housing Change	13,646	59,962	31%	3,015

* as of 1/1/2003

¹ These demolitions are related to the Seattle Housing Authority's redevelopment of the Rainier Vista garden community. The final project will add over 500 units to Columbia City.

² These demolitions are related to the Seattle Housing Authority's redevelopment of the Holly Park garden community. The final project will add over 500 units to MLK @ Holly.

APPENDIX 2: Covered Employment in Centers and Villages

	Jobs			Change 1995-2001	20-Year Growth Target (1995-2015)	% of Growth Target
	1995	2000	2001			
Urban Centers	226,959	272,113	268,860	18%	95,500	44%
Downtown	140,334	174,528	168,830	20%	62,700	45%
Belltown	17,539	22,997	23,209	32%	4,500	126%
Denny Triangle	16,279	20,356	20,142	24%	23,600	16%
Commercial Core	91,670	112,589	109,686	20%	27,000	67%
Pioneer Square	10,791	13,904	11,476	6%	4,800	14%
Chinatown-Int. District	4,055	4,682	4,317	6%	2,800	9%
First Hill/Capitol Hill	32,034	36,171	38,137	19%	11,700	52%
Capitol Hill	6,927	7,437	7,296	5%	3,000	12%
Pike/Pine	3,539	5,770	5,018	42%	1,400	106%
First Hill	18,029	18,829	21,849	21%	6,100	63%
12th Avenue	3,539	4,135	3,974	12%	1,200	36%
Northgate	9,472	11,090	11,469	21%	9,300	21%
University Community	28,386	33,413	34,181	20%	8,500	68%
Ravenna	1,266	2,109	2,005	58%	700	106%
University Northwest	7,141	7,873	8,146	14%	3,000	34%
University Campus	19,979	23,431	24,030	20%	4,800	84%
Uptown	16,733	16,911	16,243	-3%	3,300	-15%
Manuf./Ind. Centers	72,050	83,705	81,697	13%	14,660	66%
BINMIC	14,599	14,969	16,441	13%	3,800	48%
Duwamish	57,451	68,736	65,256	14%	10,860	72%

	Jobs			Change 1995-2001	20-Year Growth Target (1995-2015)	% of Growth Target
	1995	2000	2001			
Hub Urban Villages	36,704	47,574	44,548	21%	21,400	37%
Ballard	4,637	4,540	4,692	1%	3,700	1%
Bitter Lake Village	3,129	4,067	4,142	32%	2,800	36%
Fremont	4,828	5,874	5,645	17%	1,700	48%
Lake City	1,680	1,773	1,594	-5%	2,900	-3%
North Rainier	4,953	5,474	4,801	-3%	3,500	-4%
South Lake Union	15,000	22,965	20,947	40%	4,500	132%
West Seattle Junction	2,477	2,881	2,727	10%	2,300	11%
Residential Villages	28,491	33,660	33,837	19%	N/A	N/A
Outside Centers/Villages	63,673	74,177	73,573	16%	N/A	N/A
Seattle Total	427,877	511,229	502,514	17%	146,600	51%

Source: Washington State Employment Security Department; Puget Sound Regional Council; City of Seattle, Department of Design, Construction & Land Use, 2002

APPENDIX 3: Changes in Traffic Congestion

The Growth Management Act requires that the Comprehensive Plan include arterial and transit level-of-service (LOS) standards to gauge the performance of the City's transportation system. To establish LOS standards, the City identifies the minimum traffic conditions that the city will tolerate under specific circumstances. The City measures these conditions across a group of parallel arterials at specific locations (called "screenlines").

In order to track level-of-service for arterials and transit, the City uses a formula called the v/c ratio (volume-to-capacity ratio). The v/c ratio is equal to the amount of vehicles in an area (volume) during a given time period, compared to the amount that the streets in that area are theoretically able to safely accommodate given posted speeds (capacity). The City measures the v/c ratio across the screenlines identified on the following map. If the v/c ratio approaches the LOS Standard the City intends to pursue strategies to reduce the demand for vehicles to travel across that screenline and/or strategies to increase the operating capacity across the screenline.

Generally, congestion is increasing across the screenlines, with more increases in congestion during the a.m. peak hour. However, the p.m. commute hour continues to experience more congestion than the a.m. commute across the City's screenlines. The most congested areas are across the Ship Canal, in South Lake Union, into Downtown in the morning, and across the West Seattle Bridge. Generally, congestion only occurs in one direction at any given time across a screenline. However, in the evening, drivers crossing the Ship Canal at the University and Montlake bridges, and drivers in South Lake Union experience congestion in both directions.

The biggest increases in congestion have occurred on the Ballard Bridge and in South Lake Union. The v/c ratio on the Ballard Bridge has increased to 1.09 (northbound) during the p.m. peak hour and 1.07 (southbound) in the a.m. peak hour. In 1994, the v/c ratios were 1.02 and 0.91 respectively. The a.m. v/c ratio jumped to 0.99 in 1998 and 1.07 in 2000. The major jump for the northbound direction occurred between 1999 and 2000. The LOS standard for this screenline is 1.2.

The v/c ratio on the screenline in South Lake Union increased from 0.90 in 1994 to 0.99 in 2001 (westbound) during the a.m. peak hour. It has been as high as 1.01 in 1996. The LOS standard for this screenline is 1.2.

Since 1994, capacity has increased across one screenline due to improvements to the 1st Avenue South Bridge. This has resulted in drops in the v/c ratio across screenline 3.12. These drops have been especially strong southbound during the morning and northbound in the evening.

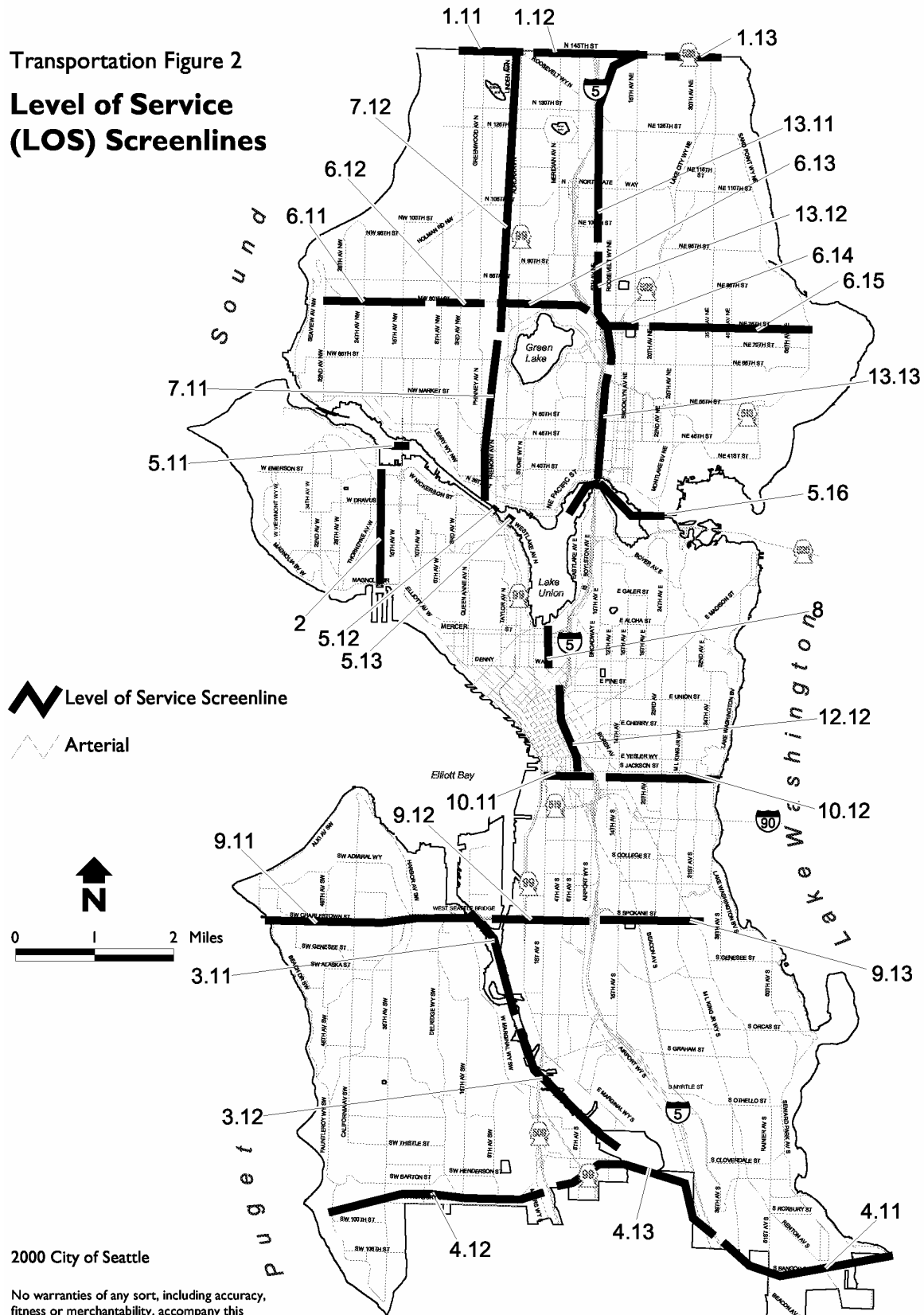
2001 Peak Hour Screenline Volume-To-Capacity Ratios

Screenline Number	Screenline Location	Segment	Direction	V/C Ratio				LOS Standard
				AM Peak Hour		PM Peak Hour		
				1994	2001	1994	2001	
1.11	North City Limit	3rd Ave NW to Aurora Ave N	NB	0.34	0.36	0.85	0.81	1.20
			SB	0.64	0.65	0.51	0.52	
1.12	North City Limit	Meridian Ave N to 15th Ave NE	NB	0.32	0.31	0.80	0.68	1.20
			SB	0.68	0.68	0.39	0.38	
1.13	North City Limit	30th Ave NE to Lake City Way NE	NB	0.34	0.41	0.81	0.85	1.20
			SB	0.88	0.86	0.50	0.55	
2	Magnolia		EB	0.55	0.54	0.47	0.46	1.00
			WB	0.31	0.34	0.63	0.62	
3.11	Duwamish River	West Seattle Fwy and Spokane St.	EB	0.65	0.75	0.40	0.43	1.20
			WB	0.26	0.32	0.70	0.76	
3.12	Duwamish River	1st Ave S and 16th Ave S1	NB	0.80	0.69	0.90	0.44	1.20
			SB	0.81	0.35	0.87	0.72	
4.11	South City Limit	ML King Jr Way to Rainier Ave S	NB	0.29	0.39	0.33	0.37	1.00
			SB	0.22	0.26	0.40	0.49	
4.12	South City Limit	Marine Dr SW to Meyers Way S	NB	0.28	0.30	0.28	0.31	1.00
			SB	0.18	0.21	0.36	0.39	
4.13	South City Limit	SR 99 to Airport Way S	NB	0.47	0.52	0.37	0.35	1.00
			SB	0.28	0.28	0.44	0.41	
5.11	Ship Canal	Ballard Bridge	NB	0.42	0.48	1.02	1.09	1.20
			SB	0.91	1.07	0.57	0.64	
5.12	Ship Canal	Fremont Bridge	NB	0.44	0.52	0.92	0.92	1.20
			SB	0.76	0.65	0.61	0.61	
5.13	Ship Canal	Aurora Ave N	NB	0.43	0.48	1.02	1.01	1.20
			SB	0.94	0.98	0.63	0.63	
5.16	Ship Canal	University and Montlake Bridges	NB	0.78	0.74	0.96	0.95	1.20
			SB	0.89	0.87	0.85	0.89	
6.11	South of NW 80th St	Seaview Ave NW to 15th Ave NW	NB	0.17	0.19	0.42	0.44	1.00
			SB	0.39	0.37	0.26	0.28	
6.12	South of N/NW 80th St	8th Ave NW to Greenwood Ave N	NB	0.20	0.21	0.46	0.46	1.00
			SB	0.32	0.35	0.29	0.30	
6.13	South of N/NE 80th St	Linden Ave N to 1st Ave NE	NB	0.19	0.22	0.43	0.45	1.00
			SB	0.39	0.39	0.27	0.33	
6.14	South of NE 80th St	5th Ave NE to 15th Ave NE	NB	0.22	0.25	0.67	0.67	1.00
			SB	0.72	0.70	0.33	0.41	
6.15	South of NE 80th St	20th Ave NE to Sand Point Way NE	NB	0.21	0.23	0.45	0.48	1.00
			SB	0.44	0.49	0.31	0.36	
7.11	West of Aurora Ave	Fremont Pl N to N 65th St	EB	0.53	0.56	0.43	0.45	1.00
			WB	0.32	0.34	0.62	0.62	
7.12	West of Aurora Ave	N 80th St to N 145th St	EB	0.42	0.42	0.41	0.41	1.00
			WB	0.28	0.30	0.53	0.49	
8	South of Lake Union		EB	0.51	0.55	0.85	0.85	1.20
			WB	0.90	0.99	0.88	0.96	
9.11	South of Spokane St	Beach Dr SW to W Marginal Way SW	NB	0.43	0.45	0.33	0.35	1.00
			SB	0.24	0.26	0.50	0.49	
9.12	South of Spokane St	E Marginal Way S to Airport Way S	NB	0.50	0.58	0.46	0.49	1.00
			SB	0.32	0.35	0.57	0.59	
9.13	South of Spokane St	15th Ave S to Rainier Ave S	NB	0.47	0.61	0.54	0.56	1.00
			SB	0.31	0.33	0.63	0.62	
10.11	South of S Jackson St	Alaskan Way S to 4th Ave S	NB	0.56	0.59	0.58	0.55	1.00
			SB	0.44	0.44	0.64	0.57	
10.12	South of S Jackson St	12th Ave S to Lakeside Ave S	NB	0.53	0.62	0.48	0.48	1.00
			SB	0.27	0.29	0.64	0.60	
12.12	East of CBD		EB	0.34	0.36	0.55	0.54	1.20

¹ Capacity increased across screenline 3.12 in 1999 as a result of improvements to the 1st Ave S. Bridge.

Screenline Number	Screenline Location	Segment	Direction	V/C Ratio				LOS Standard
				AM Peak Hour		PM Peak Hour		
			WB	0.81	0.80	0.58	0.63	
13.11	East of I-5	NE Northgate Way to NE 145th St	EB	0.37	0.37	0.74	0.69	1.00
			WB	0.52	0.47	0.52	0.54	
13.12	East of I-5	NE 65th St to NE 80th St	EB	0.28	0.28	0.41	0.42	1.00
			WB	0.35	0.36	0.37	0.41	
13.13	East of I-5	NE Pacific St to NE Ravenna Blvd	EB	0.64	0.60	0.63	0.60	1.00
			WB	0.37	0.45	0.71	0.74	

Transportation Figure 2
**Level of Service
 (LOS) Screenlines**



APPENDIX 4: Changes in Measures from Previous Reports

The 2002 monitoring report is the third Comprehensive Plan monitoring report published by the City of Seattle. Previous reports were published in 1996 and 1998. With the 2002 monitoring report, a few of the measures used in this report have changed. These changes are a result of changes in data collection. These changes are described below.

Open Space: The criteria for measuring “breathing room” open space have been solidified since the 1998 report was developed. In the Seattle Open Spaces Gap Report, the Department of Parks and Recreation set out a methodology for identifying the land that qualifies as breathing room open space. For example, previous reports may have counted land owned by the Parks Department under lakes and reservoirs as “open space.” This report attempts to remove such areas from the calculations. On the other hand, the “breathing room open space” definition used for this report includes some permanently dedicated open space owned by King County and the Port of Seattle. These areas would not have been counted in 1996 or 1998.

Low-income housing units: This is the first year in which the source of the subsidy for subsidized housing units has been reported. Previous reports focused on the total number of units, but not on the source of funding for those units. Improved record keeping has allowed the City to better track the source of funds for units developed in Seattle. This year the City is also reporting the results of surveys of the homeless conducted by the Seattle/King County Coalition for the Homeless for the first time.

Housing affordability and cost of housing: The 1998 report focused on average house values, rents and household incomes. This report presents data on median value, rent and household incomes. Median values are less influenced by values that are wildly different from most values, than are average values. For example, Bill Gates’ income is more likely to have an influence on average incomes than on median values. Median values are generally a better indicator for housing costs and income than average values, but are not always available in years that the Census is not taken.

Health care insurance: This information is based on an annual survey performed by the Seattle/King County Public Health Department (SKCPH). Due to small sample sizes, SKCPH combined three year periods in order to present statistically significant figures. Unlike data presented in previous years, this data should be available consistently over time.

Water quality: In previous years “swimability” and “fishability” were measured at two locations along the ship canal, and at Pipers and Thorton Creeks. Swimming in Seattle normally occurs at Lake Washington’s beaches, rather than along Lake Union or in the city’s creeks. In addition, access to water quality data has improved for measures of swimability at these beaches. The City has begun to track biological integrity in some of its creeks. The ability of other organisms to live in a creek gives a good indication of the ability of fish to live in those creeks and is a good measure of “fishability.” Biological integrity in these creeks should be able to be tracked over time.

Air quality: As mentioned in the discussion of air quality, federal standards for air quality changed in 1999. These new standards were followed by the Puget Sound Clean Air Agency and will be used in the future to measure air quality.

Tree coverage: Tree coverage data is measured sporadically. The most recent and accurate reports on tree coverage used different measures than were used in previous reports (percent coverage versus quality of canopy). Seattle's Urban Forest Coalition is exploring measures of tree coverage that can be updated over time.

Commuting to Work: New data based on surveys of employers and employees participating in commute trip reduction programs were available for the first time. This data may provide better data on a bi-annual basis than has been available in the past.

Transit ridership: In previous years, transit ridership was measured in terms of weekday per capita ridership. Using weekday ridership meant that rides that took place on weekends or after 6 PM were not covered. This report measures annual ridership, accounting for trips that did not take place during the normal workday. In all three reports, the routes that were counted as "Seattle" routes have changed, depending on service provided (new routes added in Seattle, or routes dropped from Seattle.) In the past, only routes that had their "residential" ends in Seattle were counted. This meant that some routes that have a large majority of their ridership boarding and exiting in Seattle, such as routes along Aurora, were not counted as Seattle routes. For 2002, some of those routes were included.

APPENDIX 5: Sources of Data

Chapter 1: Growth

- Puget Sound Regional Council
- Washington State Employment Security Department
- 1990 and 2000 U.S. Censuses
- 1995 Population and Employment Forecast for Central Puget Sound
- Daily Journal of Commerce, “Local recession worst since the early 1980s”, June 4, 2002
- City of Seattle, Department of Construction and Land Use: permit data

Chapter 2: Community indicators

Volunteering

- City of Seattle Personnel Department, Citywide Residential Survey

Open Space

- Seattle Parks and Recreation Open Spaces Gap Report
- Seattle Parks Department Geographic Information System

Crime

- SPD Annual Reports, 1996-2001

Feeling Safe in Neighborhoods

- Citywide Residential Survey

Home Ownership Rate

- U.S. Census Bureau
- Comprehensive Plan Appendices, Land Use Appendix D, page A11

Number of Households with Children

- U.S. Census Bureau

Chapter 3: Economic Opportunity and Security Indicators

Household Income

- U.S. Census Bureau
- U.S. Bureau of Economic Analysis

Education Level of the Population

- U.S. Census Bureau
- Citywide Residential Surveys

High School Dropout Rate

- King County Annual Growth Reports
- Seattle School District Data Profiles

Teen Births

- Epidemiology, Planning and Evaluation Unit, Public Health-Seattle & King County, 8/02

Low-Income Housing Units

- City of Seattle Office of Housing, Annual responses to King County data request for Countywide Planning Policies
- King County Benchmark Report Indicator 28: Public Dollars Spent on Low-Income Housing
- City of Seattle Consolidated Plan for Housing and Community Development

- City of Seattle, Housing Levy 2002 Reports and Presentations, <http://cityofseattle.net/council/HL2002/reports/index.htm>

Chapter 4: Social Equity Indicators

Housing Affordability and the Cost of Housing

- U.S. Census Bureau
- Seattle-Everett Real Estate Research Reports
- Citywide Residential Surveys
- HSH Associates, www.hsh.com

Income Distribution

- U.S. Census Bureau

Race and Ethnicity

- U.S. Census Bureau

Persons below the Poverty Level

- U.S. Census Bureau

Health Care Insurance Coverage

- Seattle/ King County Public Health Department Surveys
- “Targeting the Uninsured in Washington State”, State Planning Grant Consultant Team: University of Washington Health Policy Analysis Program; Rutgers University Center for State Health Policy; RAND; William M. Mercer, Incorporated; The Foundation for Health Care Quality, April 2002

Chapter 5: Environmental Indicators

Water Quality

- King County Department of Natural Resources and Parks (DNRP): Marine Beach Monitoring Program <http://dnr.metrokc.gov/wlr/waterres/marine/marbch.htm>
- DNRP: Swimming Beach Monitoring Program <http://dnr.metrokc.gov/wlr/waterres/lakes/bacteria.htm>
- City of Seattle, Seattle Public Utilities, “SPU’s benthic invertebrate biological monitoring program”, Power Point Presentation, June, 2002

Air Quality

- Puget Sound Clean Air Agency

Noise Level

- Citywide Residential Surveys

Tree Coverage

- Cascadia Consulting Group, University of Washington, “Seattle Urban Forest Assessment: Sustainability Matrix Report to the City of Seattle Urban Forest Coalition,” July 21, 2000, <http://www.cityofseattle.net/environment/documents/sustainability%20matrix.pdf>

Energy Consumption

- Seattle City Light Annual Reports

Water Use

- City of Seattle 1996 Long Range Water Conservation Plan

- Seattle Public Utilities
- Historical Patterns of Water Consumption (May 1997)
- Environmental Management Initiative
- Draft Energy and Water Conservation Policy

Recycling

- 1995 City of Seattle Comprehensive Solid Waste Management Plan Survey
- 2000 Seattle Public Utilities Tonnage Reports
- Seattle Public Utilities

Commuting to work

- U.S. Census Bureau
- King County Commute Trip Reduction Surveys

Transit Ridership

- Seattle Department of Transportation (SDOT)
- King County/Metro Transit
- Sound Transit

Alternative Transportation Facilities

- SPU Street Network Database (SND)
- WSDOT Office of Urban Mobility
- Seattle Transportation Department
- King County Metro
- Sound Transit